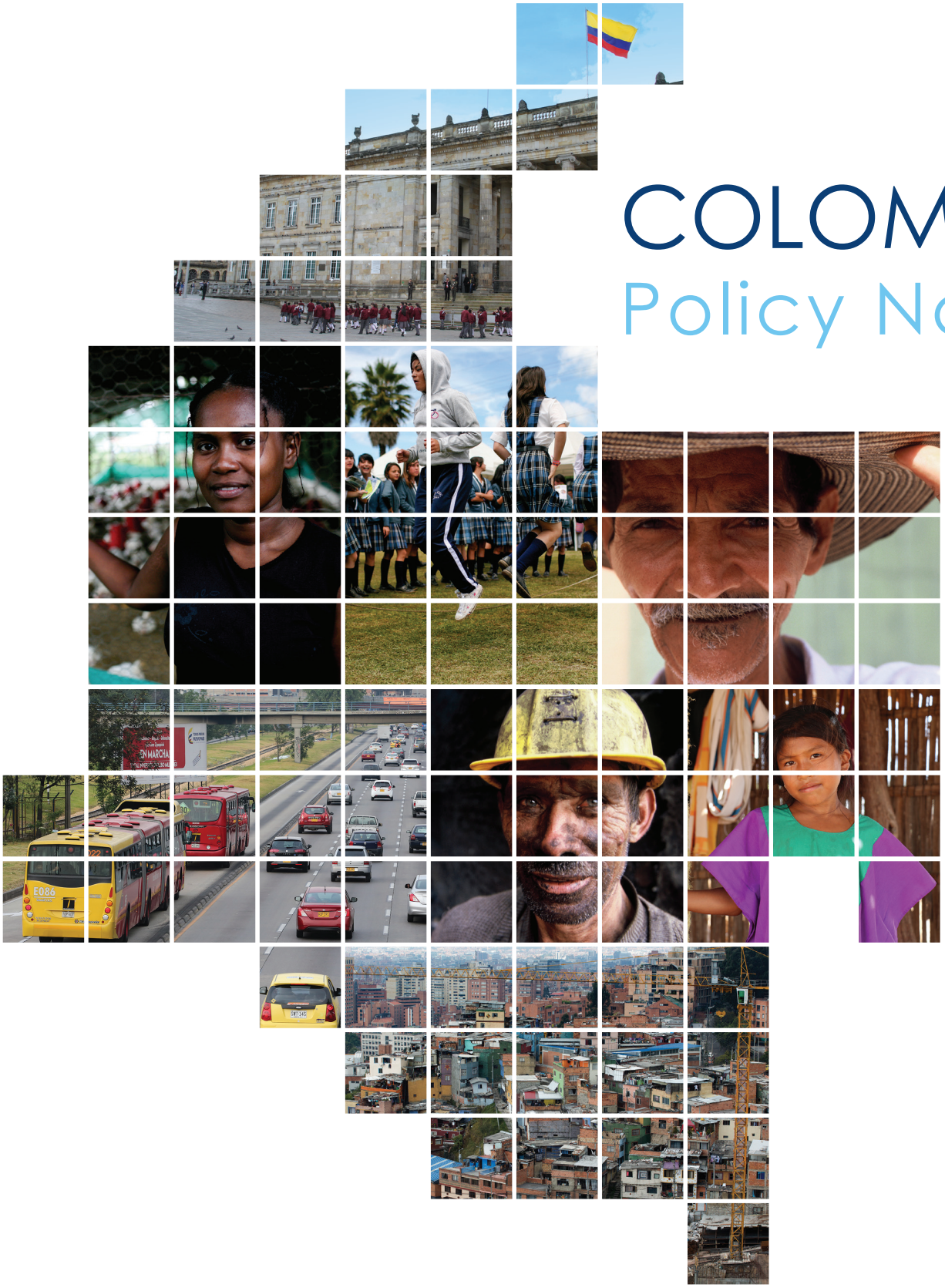

COLOMBIA
Policy Notes

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ACRONYMS

4G	Fourth Generation
ACESI	Asociación Colombiana de Empresas Sociales del Estado y Hospitales Públicos (Colombian Association os State Social Enterprises and Public Hospitals)
ADR	Agencia de Desarrollo Rural (Rural Development Agency)
ADRES	Administradora de los Recursos del Sistema General de Seguridad Social en Salud (Administrator of Resources of the General Health Social Security System)
AFPs	Administradoras de Fondos de Pensiones (Pension Fund Administrators)
ALMPs	Active Labor Market Programs
AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
ANDI	Asociación Nacional de Empresarios de Colombia (Colombian National Association of Entrepreneurs)
ANI	Agencia Nacional de Infraestructura (National Agency for Infrastructure)
ANSPE	Agencia Nacional para la Superación de la Pobreza Extrema (National Agency for Overcoming Extreme Poverty)
ANT	Agencia Nacional de Tierras (National Land Agency)
ARN	Agencia para la Reincorporación y la Normalización (Agency for the Reincorporation and Normalization)
ART	Agencia Nacional para Renovación del Territorio (National Agency for Renovation of the Territory)
ASPIRE	Atlas of Social Protection Indicators of Resilience and Equity
AUC	Autodefensas Unidas de Colombia (Colombian United Self-Defense Forces)
BAU	Business as usual
BEPs	Beneficios Económicos Periódidos (Periodic Economic Benefits)
BRE	Better Regulation Executive
CAF	Corporación Andina de Fomento (Andean Development Corporation)
CAR	Corporación Autónoma Regional (Regional Autonomous Corporation)
CCE	Colombia Compra Eficiente (Colombia Public Procurement Entity)
CCF	Cajas de Compensación Familiar (Family Welfare Funds)
CCT	Conditional Cash Transfer
CEBAF	Centros Binacionales de Atención en Frontera (Binational Border Attention Centers)
CENAF	Centros Nacionales Fronterizos (National Border Centers)
CEPAL	Comisión Económica para América Latina y el Caribe (Economic Commission for Latin America and the Caribbean)
CGE	Computational General Equilibrium
CIF	Certificado de Incentivo Forestal (Forest Incentive Certificate)
CIGER	Comité Intersectorial para la Gestión del Recurso Humano (Intersectoral Comittee for Human Resources Management)

CNPMDM	Comisión Nacional de Precios de Medicamentos y Dispositivos Médicos (National Commission for Prices of Medicines)
COA	Central Offtake Agency
COFEMER	Comisión Federal de Mejora Regulatoria (Mexican Federal Commission for Regulatory Improvement)
CONAFOR	Comisión Nacional Forestal de Mexico (Mexican National Forestry Commision)
CONAGUA	Comisión Nacional del Agua de Mexico (Mexican National Water Commission)
CONPES	Consejo Nacional de Política Económica y Social (National Council for Economic and Social Policy)
CPC	Consejo Privado de Competitividad (Private Competitiveness Council)
CRA	Comisión de Regulación de Agua Potable y Saneamiento Básico (Regulatory Commission for Water and Basic Sanitation)
CREE	Impuesto sobre la Renta para la Equidad (Income Tax for Equity)
CREG	Comisión Reguladora de Energía (Energy Regulatory Commission)
CRR	Comprehensive Rural Reform
CTM	Comité Técnico Mixto (Joint Technical Committee)
DANE	Departamento Administrativo Nacional de Estadística (National Administrative Department of Statistics)
DB	Defined Benefit
DC	Defined Contribution
DDR	Disarmament, Demobilization and Reintegration of Former Combatants
DIAN	Dirección de Impuestos y Aduanas Nacionales (National Tax and Customs Administration)
DNP	Departamento Nacional de Planeación (National Planning Department)
DPL	Development Policy Loan
DPS	Departamento para la Prosperidad Social (Department for Social Prosperity)
DRG	Diagnostic Related Groups
DRM	Disaster Risk Management
ECD	Early Childhood Education
EDGE	Excellence in Design for Greater Efficiencies
EDIT	Encuesta de Desarrollo e Innovación Tecnológica (Technology Innovation and Development Survey)
EE	Energy Efficiency
EEA	European Economic Area
EIAIPI	Educación Inicial y Atención Integral a la Primera Infancia (Early Childhood Education)
ELN	Ejército de Liberación Nacional (National Liberation Army)
EMEs	Emerging Market Economies
ENL	Encuesta Nacional de Logística (National Logistics Survey)
EPS	Entidad Promotora de Salud (Health Insurance Entity)
ESAL	Entidades sin ánimo de lucro (Non-profit entities)
ETC	Entidades Territoriales Certificadas (Certified Territorial Entities)
ETFs	Exchange-Traded Funds
FAO	Food and Agriculture Organization

FARC-EP	Fuerzas Armadas Revolucionarias de Colombia – Ejército del Pueblo (Colombian Revolutionary Armed Forces – People's Army)
FDI	Foreign Direct Investment
FDN	Financiera de Desarrollo Nacional (Financial Institution for National Development)
FGPM	Fondo de Garantía de Pensión Mínima (Minimum Pension Guarantee Fund)
FINDETER	Financiera de Desarrollo Territorial (Financial Institution for Territorial Development)
FINTECH	Financial Technologies
FIP	Fundación Ideas para la Paz (Ideas for Peace Foundation)
FOGAFIN	Fondo de Garantías de Instituciones Financieras (Deposit Insurance Fund)
FONPET	Fondo Nacional de Pensiones de las Entidades Territoriales (Territorial Entities National Pensions Fund)
FOPEP	Fondo de Pensiones Públicas de Nivel Nacional de Colombia (Colombian National Public Pension Fund)
FOSFEC	Fondo de Solidaridad y Fomento al Empleo y Protección al Cesante (Solidarity Fund for Employment Promotion and Unemployment Protection)
FSB	Financial Stability Board
FSP	Fondo de Solidaridad Pensional (Pension Solidarity Fund)
FSR	Financial Stability Report
FX	Foreign Exchange
GDP	Gross Domestic Product
GEIH	Gran Encuesta Integrada de Hogares (Integrated Household Survey)
GHG	Greenhouse Gas
GoC	Government of Colombia
GVCs	Global Value Chains
IADB - IDB	Inter-American Development Bank
IASC	Inter-Agency Standing Committee
ICA	Impuesto de Industria y Comercio (Industry and Commerce Tax)
ICA	Instituto Colombiano Agropecuario (Colombian Agricultural Institute)
ICBF	Instituto Colombiano de Bienestar Familiar (Colombian Institute for Family Welfare)
ICFES	Instituto Colombiano para la Evaluación de la Educación (Colombian Institute for Education Evaluation)
ICT	Information and Communication Technology
IDEAM	Instituto de Hidrología, Meteorología y Estudios Ambientales (Institute for Hydrology, Meteorology and Environmental Studies)
IDP	Internally Displaced People
IDS	Insurance of Disability and Survivorship
IETS	Instituto de Evaluación de Tecnologías en Salud (Health Technology Evaluation Institute)
IFC	International Finance Corporation
IGAC	Instituto Geográfico Agustín Codazzi (Geographical Institute Agustin Codazzi)
IMF	International Monetary Fund
INCODER	Instituto Colombiano de Desarrollo Rural (Colombian Institute of Rural Development)
IPS	Instituciones Prestadoras de Servicios de Salud (Health Services Providers)
ISAS	Integrated Social Assistance Service Information System - Turkey

JA	Jóvenes en Acción (Youth in Action)
LAC	Latin America and the Caribbean
LCR	Liquidity Coverage Ratio
LVC	Land Value Capture
MADS	Ministerio de Ambiente y Desarrollo Sostenible (Ministry of Environment and Sustainable Development)
MFA	Más Familias en Acción (More Families in Action)
MFMP	Marco Fiscal de Mediano Plazo (Medium Term Fiscal Framework)
MHCP	Ministerio de Hacienda y Crédito Público (Ministry of Finance and Public Debt)
MIAS	Modelo Integral de Atención en Salud (Integrated Model of Health Care)
MILA	Mercado Integrado Latinoamericano (Integrated Latin American Market)
MNC	Marco Nacional de Cualificaciones (National Qualifications Framework)
MoF	Ministry of Finance
MoH	Ministry of Health
MoI	Ministry of Interior
MOPS	Management and Organizational Practices Survey
MOU	Memorandum of Understanding
MRV	Monitoring, Reporting and Verification
MSMEs	Micro, Small and Medium Enterprises
MTFF	Medium Term Fiscal Framework
NCRE	Non-Conventional Renewable Energy
NDC	Nationally Determined Contributions
NDP	National Development Plan
NEET	Not in Education, Employment or Training
NIS	National Innovation System
NTM	Non-Tariff Measures
NUTP	National Urban Transport Program
OCAD	Órgano Colegiado de Administración y Decisión (Collegiate Body of Management and Decision)
OECD	Organisation for Economic Co-Operation and Development
PA	Peace Agreement
PAE	Programa de Alimentación Escolar (School Feeding Program)
PAYG	Pay-As-You-Go
PDETs	Programas de Desarrollo con Enfoque Territorial (Development Programs with a Territorial-Based Focus)
PDP	Productive Development Policy
PDT	Planes de Desarrollo Territorial (Local Development Plans)
PER	Public Expenditure Review
PGOT	Política General de Ordenamiento Territorial (General Territorial Planning Policy)
PHC	Primary Health Care
PISA	Programme for International Student Assessment
PISDA	Planes Integrales Comunitarios y Municipales para la Sustitución de Cultivos Ilícitos y Desarrollo Agrario Alternativo (Comprehensive Community-based and Municipal Plans for the Substitution of Illicit Crops and Alternative Agrarian Development)

PIT	Personal Income Tax
PNIS	Programa Nacional Integral para la Sustitución Voluntaria de Cultivos Ilícitos (National Comprehensive Program for the Substitution of Crops Used for Illicit Purposes)
UNDP	United Nations Development Programme
PODER	Programa de Oportunidades y Desarrollo para Evitar Riesgos (Opportunities and Development Program to Avoid Risks)
POMCAs	Plan de Manejo y Ordenamiento de una Cuenca (Watershed Management Plans)
POS	Plan Obligatorio de Salud (Mandatory Health Plan)
POT	Programas de Ordenamiento Territorial (Territorial Zoning Plans)
PPA	Power Purchase Agreement
PPP	Public Private Partnerships
PROST	Pension Reform Options Simulation Toolkit
PTA	Programa Todos a Aprender (Everyone to Learn Program)
R&D	Research and Development
RAIS	Régimen del Ahorro Individual con Solidaridad (Private Pension Pillar)
RIA	Regulatory Impact Analysis
RIMISP	Centro Latinoamericano para el Desarrollo Rural (Latin American Center for Rural Development)
ROA	Return On Assets
ROE	Return On Equity
RPM	Régimen de Prima Media (Pay-As-You-Go Public Pension Pillar)
RSH	Registro Social de Hogares – Chile (Social Household Registry)
RUT	Registro Único Tributario (Single Tax Registry)
SAC	Sociedad de Agricultores de Colombia (Farmers Society of Colombia)
SDGs	Sustainable Development Goals
SECOP	Sistema Electrónico de Contratación Pública (Electronic Public Procurement System)
SEDLAC	Socio-Economic Database for Latin America and the Caribbean
SEDPEs	Sociedades Especializadas en Depósitos y Pagos Electrónicos (Specialized Companies in Electronic Deposits and Payments)
SENA	Servicio Nacional de Aprendizaje (National Learning Service)
SERCE	Segundo Estudio Regional Comparativo y Explicativo (Second Comparative and Explanatory Regional Study)
SFC	Superintendencia Financiera de Colombia (Financial Superintendence of Colombia)
SGP	Sistema General de Participaciones (General Participations System)
SGR	Sistema General de Regalías (General Royalties System)
SGSSS	Sistema General de Seguridad Social en Salud (General System of Social Security in Health)
SIAC	Sistema de Información Ambiental Colombiano (Colombian Environmental Information System)
SIASAR	Sistema de Información de Agua y Saneamiento Rural (Water and Rural Sanitation Information System)
SIGCE	Sistema de Información y Gestión de la Calidad Educativa (System of Education Quality Management)

SINA	Sistema Nacional Ambiental (National Environmental System)
SINAS	Sistema de Inversiones en Agua Potable y Saneamiento (Water and Sanitation Investment System)
SIRH	Sistema de Información del Recurso Hídrico (Water Resources Information System)
SISBEN	Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales (Identification System for Potential Benficiaries of Social Programs)
SISPRO	Sistema Integral de Información de la Protección Social (Social Protection Information System)
SITP	Sistema Integrado de Transporte Público (Integrated Public Transport System)
SMEs	Small and Medium Enterprises
SNGs	Subnational Governments
SNIES	Sistema Nacional de Información de Educación Superior (National Higher Education Information System)
SNR	Superintendencia de Notariado y Registro (Superintendence of Notaries and Registries)
SOCX	Social Expenditure Database
SOE	State-Owned Enterprise
STI	Science, Technology and Innovation
SUCOP	Sistema Único de Consulta Pública (Single System for Public Consultation)
TERCE	Tercer Estudio Regional Comparativo y Explicativo (Third Comparative and Explanatory Regional Study)
TFP	Total Factor Productivity
TVET	Technical and Vocational Education and Training
UN	United Nations
UNDSS	United Nations Department of Safety and Security
UNODC	United Nations Office on Drugs and Crime
UPC	Unidad de Pago por Capitación (Per Capita Payment Unit)
UPME	Unidad de Planeación Minero Energética (Energy and Mining Planning Unit)
UPRA	Unidad Regional de Planeación Agropecuaria (Rural Agricultural Planning Unit)
URF	Unidad de Regulación Financiera (Financial Regulation Unit)
URT	Unidad de Restitución de Tierras (Land Restitution Unit)
UVT	Unidad de Valor Tributario (Tax Value Unit)
VAT	Value Added Tax
VRE	Variable Renewable Energy
VUCE	Ventanilla Unica de Comercio Exterior (Single Window for Foreign Trade)
VUE	Ventanilla Unica Empresarial (Single Window for Business Registration)
WB	World Bank
WDI	World Development Indicators
WEF	World Economic Forum
WWF	World Wildlife Fund

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OVERVIEW

Colombia was one of the fastest-growing economies in Latin America between 2004 and 2014. During this period, Colombia enjoyed rapid economic growth of close to 5 percent annually, making it one of the region's best performers (Figure 0.1). The rapid growth helped narrow the per capita income gap with regional peers and high-income countries. The positive oil income shock bolstered domestic demand and contributed, together with structural reforms and prudent macroeconomic management, to a strong acceleration in investments to an average of 24 percent of GDP during the commodity boom period. Increased foreign direct investment (FDI) was supported by regulatory reforms, improved security and renewed efforts through investment treaties, free trade agreements, and, in recent years, the advances made under the OECD accession process.

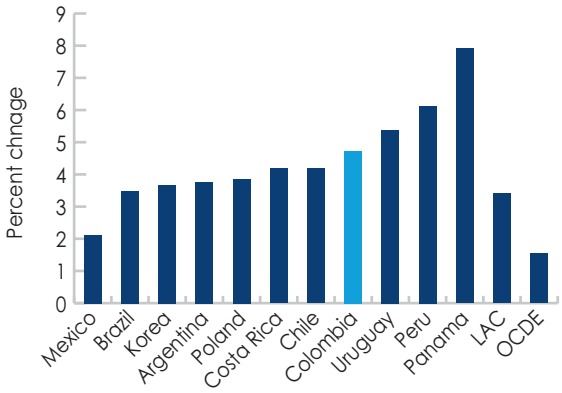
Solid economic growth contributed to progress in terms of shared prosperity, poverty reduction and human development outcomes. The moderate poverty rate declined by nearly 20 percentage points from 47.4 in 2004 to 26.9 by 2017, while extreme poverty nearly halved from 14.8 to 7.4 percent over the same period (Figure 0.2). More than 6.5 million people were lifted out of poverty over this period. Increased earnings and higher employment account for nearly 80 percent of the decline in moderate poverty[1], especially in the rural areas where these accounted for 87 percent of the poverty reduction. A significant expansion of social programs[2] also contributed to reducing poverty rates. Multidimensional poverty also declined by more than 25 percentage points to 17 percent in 2017, in large part due to increased access to health care and education, and higher educational attainment. Per capita incomes among the bottom 40 percent of the population grew above 4 percent, faster than the national average over the period 2002-2016.

Progress in Key Areas

Oil revenue provided budgetary resources for increased public spending, contributing to improved outcomes. Government revenue from oil production reached 3.3 percent of GDP in 2013, at the peak of the oil boom. Accompanied by an increase in tax revenue as a result of a series of tax reforms, total general government revenue increased from 25.2 to 27.5 percent of GDP in 2014. This allowed for an expan-

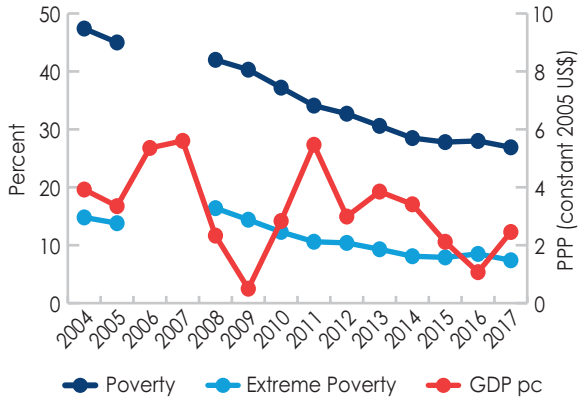
1 Of this, 50 percent was on account of higher earnings and 30 percent due to increased employment.
2 Public transfers provided through Familias en Acción and Adulto Mayor social assistance programs.

Figure 0.1 Average annual GDP growth (2004-2014)



Source: World Bank, OECD.

Figure 0.2 Trends in official poverty rates[3] (left) and GDP per capita (right)



Source: World Bank staff calculations based on GEIH, DANE.

sion of public spending: general government spending on health increased to 5.4 percent of GPD by 2014, from 4 percent of GDP in 2004. Government expenditure on education represented 4.7 percent of GDP in 2014 (15.8 percent of government spending), up slightly from 4.1 percent of GDP in 2004. Increased spending was accompanied by improved human development outcomes: by 2017, Colombia had reached almost universal health coverage, with 98 percent of the population enrolled in either the contribution-based system (for those in formal employment and the non-poor, equivalent to 48 percent), and the non-contributory, subsidized system (52 percent). School enrollment rates increased across primary, secondary and tertiary education, and the average number of years of education rose from 6.8 to 8 between 2005 and 2015.

Macroeconomic reforms reinforced the beneficial effects of the favorable external environment. Key components of Colombia's macroeconomic framework include the adoption of a full-fledged inflation-targeting regime[4], a flexible exchange rate, a Fiscal Rule (2011) for the central government, and a Medium-Term Fiscal Framework. These helped anchor market expectations and contributed to the achievement (and maintenance) of Colombia's investment grade rating, which supported higher capital inflows and lowered borrowing costs. On the other hand, the solid macroeconomic framework also helped build resilience to external shocks, including to the significant terms of trade shock that started in mid-2014, and facilitated the external and domestic economic adjustment.

The OECD accession process boosted the momentum for structural reforms. The process, which started with the invitation to open accession talks in 2013, was completed in June 2018, when Colombia became the 37th member of OECD. As part of this accession process, Colombia undertook a series of reforms, including

3 Poverty estimates are based on official poverty lines. Given the methodological changes that took place in 2006 and 2007, only the statistics reported for the 2002-05 and 2008-17 periods are comparable.

4 The full-fledged inflation targeting was introduced in 1999, with inflation as the nominal anchor, a floating exchange rate, and the short-term interest rate as the main instrument.

the creation of a General Directorate of State Participation to centralize state-owned enterprise (SOE) ownership; the strengthening of the independence of superintendents; the exchange of tax information with 115 jurisdiction in order to strengthen the fight against tax evasion; the update of the tax code; reforms to the liquor monopolies to increase competitiveness and transparency; and stronger protection of workers' rights and compliance with labor laws.

Additional efforts to improve the business environment and reduce costs for businesses are beginning to bear fruit. Colombia has progressively eliminated procedures and time dedicated to open businesses: procedures were cut from 11 to 8 and time from 40 days to 11 days between 2008 and 2017[5], although there is great divergence between regions.[6] Other key reforms in this area include the creation of a one-stop shop for company registration and the launch of a national strategy to eliminate, automate and simplify barriers, regulations or administrative procedures (*Menos trámites más simples*). In 2012, Colombia approved a tax reform cutting payroll taxes by 13.5 percentage, which has helped bolster labor formality. Furthermore, the 2016 tax reform reduces progressively the corporate income tax rate, by a cumulative 7 percentage points by 2019, although at 33 percent it will remain higher than OECD and LAC average tax rates.

Steps were also taken to strengthen logistics and connectivity, which are critical for greater competitiveness. Progress was made on several fronts: the implementation of legal reforms to promote public-private partnerships for infrastructure investment, culminating in the 4th Generation (4G) infrastructure concession program; the process to restore the navigability of the Magdalena River; and the launching of the Master Plan of Intermodal Transport. Furthermore, Colombia adopted the World Trade Facilitation Agreement, and issued a new Customs Statute, allowing for advanced declarations, adoption of risk assessment to screen imports and exports, electronic payment, abbreviated customs clearance, use of non-intrusive inspection equipment.

These structural reforms were accompanied by measures to ensure environmental sustainability. In fact, Colombia has become a champion for sustainable development in recent years, embracing a Green Growth strategy for promoting sustainable growth and competitiveness, and reducing vulnerabilities to the impacts of climate change. Colombia also demonstrated its commitment to climate change mitigation, setting a unilateral and unconditional target of 20 percent reduction[7] in its greenhouse gas emissions (GHG) by 2030. The adoption of a carbon tax and a tax on plastic bags in 2016, as well as mechanisms for carbon neutrality, reinforce Colombia's position at the forefront of the green growth agenda.

The end of the armed conflict with the Farc-EP represents a critical step towards peace and social sustainability. Improvements in security over the past 10 years already contributed significantly to greater investment in the country at large. The end of the 50-year conflict with the country's main rebel group (Farc-EP) in 2016 brings the prospect of faster growth in lagging regions and a reduction in territorial inequalities. As such, it offers a chance to achieve the social conditions for faster poverty reduction and inclusive growth.

5 World Bank (2017b).
6 Arango and Flores (2017). Labor informality and Colombia Subnational Doing elements for a differentiated minimum salary by regions in Colombia. Banco de la Republica Borradores de Economía no. 1023.
7 With respect to the Business-as-Usual (BAU) scenario.

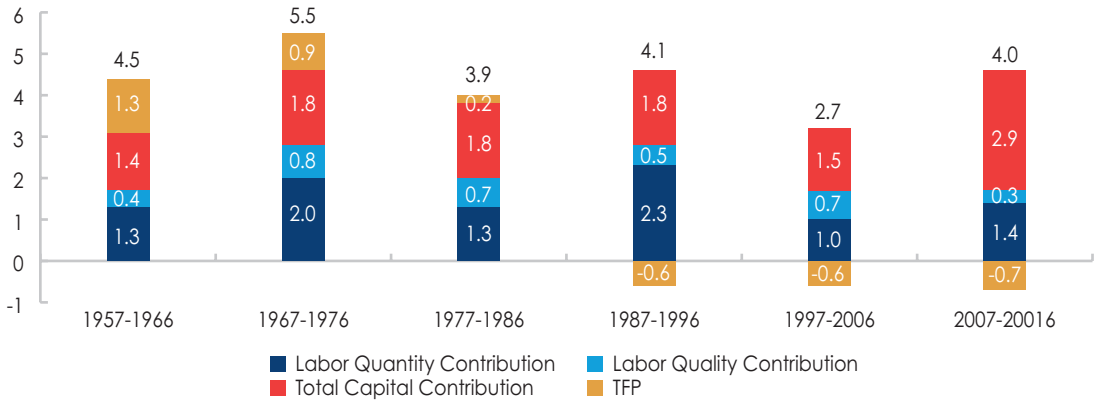
Remaining Challenges

Despite these important advances, the fall in oil prices exposed the risks associated with Colombia's dependence on the oil sector. The sharp fall in oil prices since mid-2014 resulted in a terms of trade shock estimated at more than 3 percent of GDP, one of the largest in the region and its largest from a historical perspective. Economic growth decelerated to an average of 2.3 percent over the period 2015-2017, less than half of what it was during the commodities price boom. The oil price shock exposed the dependence on commodities exports, both for external and for fiscal accounts. Exports fell by 61.3 percent between 2013 and 2016, and the current account deficit rose to 6.3 percent of GDP in 2015 from 3.2 percent in 2013. Central government oil revenues fell by 3.2 percent of GDP during the same period, necessitating a significant fiscal adjustment in order to ensure compliance with the Fiscal Rule. Given that 80 percent of public spending is rigid, this adjustment fell primarily on general government investment, which was cut from 7.4 percent of GDP in 2014 to 5.5 percent 2016. Despite the launch of the 4G program, private investment only partially compensated for the reduction in public investment ratio. Lower investment has affected Colombia's potential growth rate, which is now estimated at 3.4 percent.

High growth during the commodity boom masked the fact that total factor productivity (TFP) has been negative over the past three decades. In the last decades growth in Colombia was mostly driven by capital and labor expansion, with smaller contributions from improved quality of labor. Instead, TFP has subtracted from growth since 1987 (Figure 0.3). During the boom years, capital accumulation more than compensated for negative TFP growth; but the prospect of permanently lower oil prices underlines the need for boosting productivity and finding new engines of growth.

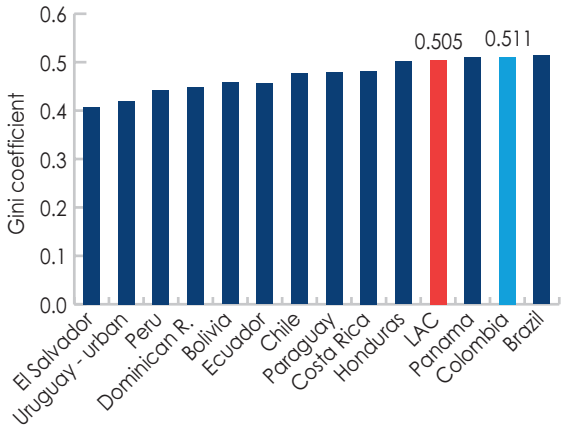
Although inequality has declined, Colombia remains a highly unequal country with low income mobility. Colombia's inequality as measured by the Gini coefficient declined from 57.2 in 2002 to 50.8 in 2017, primarily due to labor income dynamics and to a lesser extent transfers (Figure 0.5). However, inequality in Colombia remains higher than the LAC region's average (50.5 in 2015, Figure 0.4), with

Figure 0.3 Growth decomposition



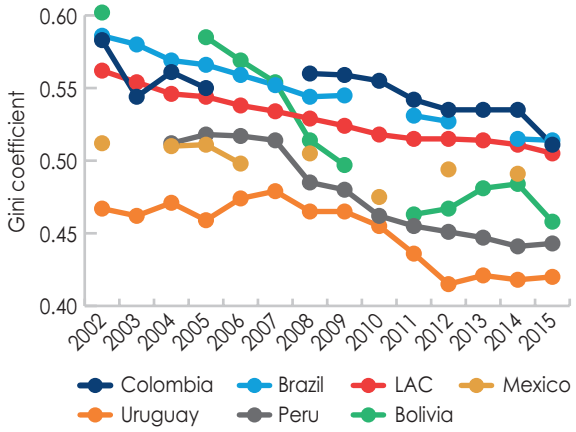
Source: The Conference Board (2017), Total Economy Database™ Growth Accounting and Total Factor Productivity, 1950-2016, November 2017 (Adjusted Version).

Figure 0.4 Gini coefficient in selected LAC countries, 2015



Source: LAC Equity Lab tabulations based on SEDLAC (CEDLAS and World Bank) and World Development Indicators (WDI).

Figure 0.5. Trends in Gini coefficient in selected LAC countries



Source: LAC Equity Lab tabulations based on SEDLAC (CEDLAS and World Bank) and World Development Indicators (WDI).

Colombia being the second most unequal country in the region. Even though the pace of inequality reduction accelerated in Colombia, countries like Bolivia and Honduras, with comparable or even higher levels of inequality in 2002, managed to reduce more income inequality since 2002. The persistence of high inequality in Colombia is underpinned by several factors, including insufficient access to quality education and skills formation (Figure 0.6), pensions, and affordable housing, despite recent advances in these areas. Pensions, primarily incurring to the upper part of the income distribution, are inequality increasing, with a pseudo-Gini coefficient of around 0.72. Between 2002 and 2016, shared prosperity -measured as the annualized income growth of the bottom 40- was generally higher than the overall average income growth across departments, resulting in a narrowing of the income gap between the less well-off and the average Colombian. Moreover, similarly to poverty reduction, shared prosperity outcomes differ across the urban-rural divide, although there were important advances in shared prosperity across departments.

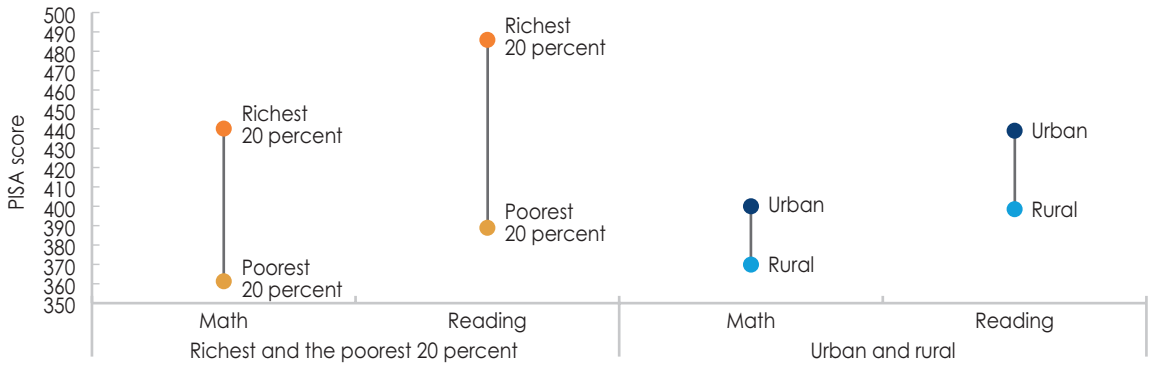
Social protection programs that are central to reducing poverty and increasing shared prosperity remain fragmented with gaps and/or overlaps in the demand and supply of social services. Lack of adequate and up-to-date information hinders the response to evolving needs. Asymmetric information, coverage gaps and often conflicting eligibility requirements are barriers to effective and opportune access to social programs. Moreover, individual programs face design and implementation challenges that limit their effectiveness, such as limited mechanisms for program exit or to establish linkages with complementary programs (*Más Familias en Acción*), and limited capacity to track employability outcomes (*Jóvenes en Acción*). Meanwhile, pension coverage remains low and is expected to decline under current conditions over the medium term. Many of those affiliated with the pension system end up receiving lump-sum benefits at retirement, as structural issues in the labor market make it difficult to meet the minimum requirements for receiving annuities. Furthermore, there is unfair competition between the Pay-As-You-Go defined-benefit public scheme (*Ré-*

gimen de Prima Media) and the fully-funded defined contribution private scheme (*Régimen del Ahorro Individual con Solidaridad,* RAIS). The arbitrage possibilities that exist between the two schemes, while generating a positive cashflow for the government in the short-term, will put pressure on the system over the longer term and undermine the development of annuities markets.

Colombia still lags in human capital and skill formation with respect to peers. Overall educational outcomes and quality lag that of OECD peers. Educational achievements as measured by the PISA results remain low, with students underperforming in math, science and reading tests relative to OECD peers, although there have been improvements in recent years across the board. Furthermore, the educational achievements vary greatly across the income distribution (Figure 0.6) limiting income mobility across generations. And despite universal health coverage, improvements in key health outcome indicators have generally been similar or lower than those seen in the LAC region, and are significantly lower than the average for the OECD. This is mainly due to the persistence of barriers to access that still affect a large segment of users, and to the incomplete and insufficient deployment of a results-based patient-focused model of care.

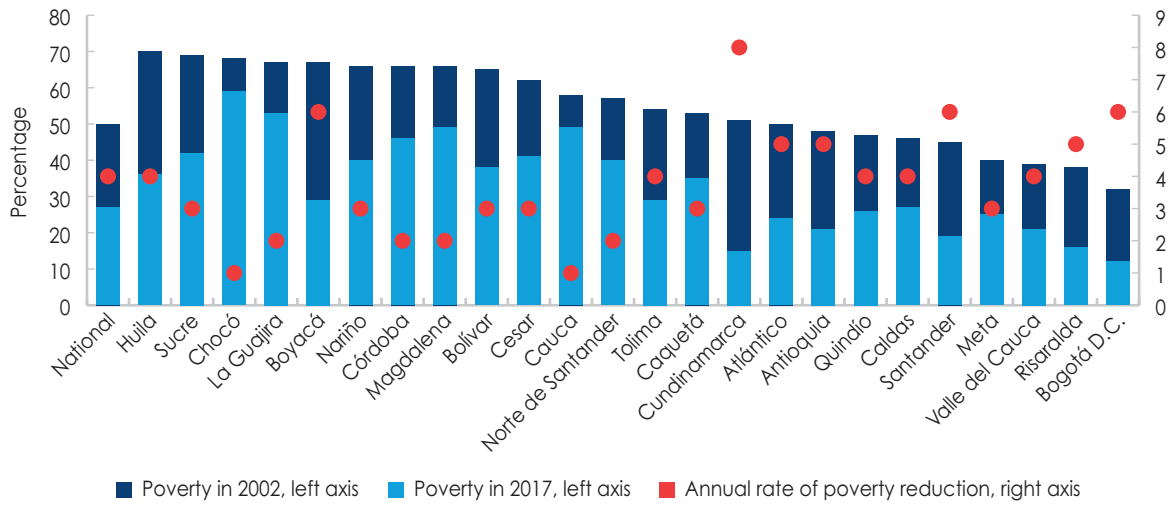
Regional and urban-rural disparities persist. Poverty data at the department level reveals deep geographical disparities, one of the most important challenges Colombia has in fostering a balanced territorial development. The poverty rate gaps between the poorest and least poor departments has widened. In 2002 the poverty rate gap between Choco and Bogota was already very large at 37.8 percentage points. By 2017 this has increased to 47 percentage points (Figure 0.7). A key source of persistent inequality in Colombia are the historical disparities between urban and rural areas. Despite sizeable declines in the incidence of poverty at a national level over the last fifteen years, historical disparities across geographical areas persist. In 2017, extreme poverty was over 3 times higher in rural areas than in urban, and moderate poverty was 55 percent higher. 97 out of 100 people in urban areas have access to drinking water, compared to only 74 out of 100 people in rural areas. Similar patterns exist with respect to sanitation, where 85.2 percent of urban households have access to compared with 67.9 percent or rural households. The per capita GDP of the department with the

Figure 0.6 Mathematics and reading PISA scores across income quintile and area of residence



Source: OECD (2016) based on PISA 2015.

Figure 0.7 Moderate Poverty and Annual Poverty Reduction Rates between 2002-2017, by department



Source: World Bank calculations based on GEIH, MESEP - DANE.

lowest GDP per capita (Vaupes) represented only 16.7 percent of the GDP per capita of the department with the highest GDP per capita (Santander). Furthermore, two thirds of the departments had per capita GDP less than half that of Santander.

These disparities are higher in Colombia than in Latin America and in most of the world. Overall, regional inequalities are 42 times higher in Colombia than in Australia and more than 5 times higher than in Canada or the United States, they are also higher than in most neighboring Latin American countries.[8] Socio-economic development imbalances have been an important factor in the armed conflict and have, in turn, been aggravated by it. Decades of internal conflict destroyed physical, human, and social capital with important implications for regional growth. One of the contributing factors to differences in productivity across the different regions of Colombia is the wide variation in the quality of infrastructure (particularly transport), with low connectivity to markets being a critical obstacle for economic development in low-income regions. Weak local and regional administrative capacities are also curtailing the delivery of higher quality public services across regions.

Rapid depletion of the country's natural capital poses important risks and carries high costs. Colombia faces mounting anthropic pressures on forests, key ecosystems, soils and water, has untapped potentials to develop nature based economies. Rapid deforestation and ecosystem degradation impose severe costs, increase vulnerability to extreme weather events, and hinder the capacity to achieve international commitments, while at the same time the potential to develop a stronger forestry sectors remains untapped. Meanwhile, productivity and innovation in the agricultural sector are low, with important subsidies and price stabi-

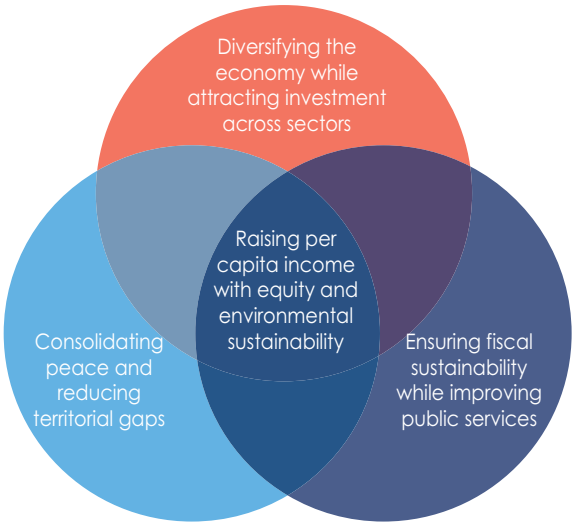
8 OECD (2014). OECD Territorial Reviews: Colombia 2014, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264224551-en.

lization mechanisms supporting the sector. Insecurity of land tenure also impacts negatively on investment and productivity. Environmental impacts from widespread illegal mining are severe. Current regulatory framework limits the development of non-conventional renewable energy and of energy efficiency strategies, and Colombia is yet to achieve universal energy access. Higher pollution and inadequate waste management have led to low environmental quality in urban areas. Lack of strategic alignment of incentives and regulations poses challenges for transitioning towards a circular model that promotes efficient use of resources, reuse and recycling. Furthermore, natural disasters and climate change will likely impose significant economic and social costs in the years to come.

Looking Ahead: Priority Reforms

It is critical for the new administration to boost the reform momentum, focusing on implementation and results. The new government will face the challenge of unifying a polarized society and meeting the population's expectations and aspirations of peace, security, prosperity and reduced inequality. Given the remaining challenges discussed above, measures in the following areas are of highest priority: (i) diversifying the economy while attracting investment across sectors, by boosting new sources of growth; (ii) ensuring fiscal sustainability while improving public services, both in terms of access and quality; and (iii) consolidating peace and reducing territorial gaps. Accelerating progress in these three areas would contribute to the overall objective of raising per capita income with greater equity and environmental sustainability (Figure 0.8). In general, special attention should be given to the full implementation of existing strategies, and legal and institutional frameworks, which are typically of high quality. As such, the policy notes presented here focus to a large extent on ways in which this implementation can be improved, putting forward specific recommendations to advance towards the main objective.

Figure 0.8 Main development challenges



Source: World Bank staff.

Diversifying the economy while attracting investment across sectors

Higher productivity growth will be critical to achieve faster, more diversified economic growth and welfare gains. The improvements in the business environment in the past decade are not sufficient to raise growth to rates that would put Colombia on a path towards convergence with high-income countries. To overcome the productivity challenge, Colombia should eliminate barriers to growth and external competition; address government and market failures; promote private sector investment and participation; and support firms. One important priority is to continue efforts towards simplification and improved quality of regulations, including through regulatory impact assessments. Furthermore, a structural trade regime reform would reduce tariff disper-

sion and tariffs on agricultural products, and improve efficiency of the tariff system, while removing unnecessary non-tariff barriers. Reform efforts should also be directed at reducing the regulatory burden of trading across borders, optimizing customs processes, and other measures to develop an efficient logistics sector. Finally, strengthening firm productivity by fostering good management practices, supporting research and development, and fostering innovation is critical. These efforts should be complemented by measures to reduce the cost and increase the benefits of business formalization, by reducing labor costs and offering initiatives and products to formal firms to strengthen their capabilities (**Note 2**).

Infrastructure investment also need to be boosted, to improve access to markets and reduce logistics costs. Estimates suggest that Colombia's infrastructure financing gap is as high as US$339 billion through 2037.[9] In other words, to close the gap the country would need to invest an additional 3-4 percent of GDP annually. This requires maximizing financing not only from public but also private sources. Colombia has been at the forefront of Public Private Partnerships (PPPs) in the transport sector in recent years, with the launch of the 4th generation (4G) road concession program. The 4G has demonstrated the benefits that a solid legal and institutional framework for private participation in infrastructure financing can bring. The objective is to build on the lessons learned from the 4G to mobilize private financing for other projects, at the lowest possible cost from both domestic and international sources, and in a way that ensures fiscal sustainability, efficiency and quality. To achieve this, there needs to be greater clarity about the criteria for when to use PPPs, especially in sectors where public sector procurement may be the traditional choice. Strengthening the institutional capacity to manage and administer projects is equally important. Expanding the role of the development bank Financiera de Desarrollo Nacional (FDN) as the structuring agent and the local bank to catalyze infrastructure finance is another option. To strengthen and broaden domestic and international financing sources, it will be essential to attract new players to the infrastructure financing market, including pension funds, and reform financial sector regulations to facilitate financial innovations (**Note 10**).

Efficient and inclusive financial systems are also critical to support productive investments and sustain economic growth. To increase the breadth and depth of the Colombian financial sector and correct inefficiencies in the allocation of capital, important policy reforms are necessary. Reforms should focus on strengthening the financial regulatory architecture; ensuring adequate levels of financial supervision of conglomerates; and reducing concentration. Moreover, despite notable progress in some segments of domestic capital markets, more needs to be done to increase capital market size and liquidity, and to encourage product development. Access to finance needs to be expanded by developing financial instruments tailored to un- and under-served segments of society, such as MSMEs; women and rural populations; and people on lower incomes. Improved access to finance will also help the sector catch up with the fast-evolving technological developments (**Note 11**).

Finally, "greening" growth is both a necessity and an opportunity for Colombia, which is rich in natural capital. An integrated framework for land planning, sustainable forest management

9 Estimate from the G20 Investment Hub including energy, transport, water and telecoms investments necessary to sustain projected growth rates.

and agricultural production and agribusiness, provision of basic public goods in the rural area, clarity and security of land tenure are critical to overcome the challenges in land-based sectors. Fiscal and economic incentives could promote productive land use, climate-smart practices, efficient use of water, and forest restoration. Policy priorities to help ensure a transition towards cleaner urban and rural spaces and a circular economy include green growth-oriented urban planning, targeted actions in transport and industrial sectors, additional financing for waste collection and disposal services in rapidly urbanizing areas and informal settlements, establishing standards and requirements for discharging non-domestic waters, and an integrated sustainable materials management (**Note 12**).

Ensuring fiscal sustainability while improving public services

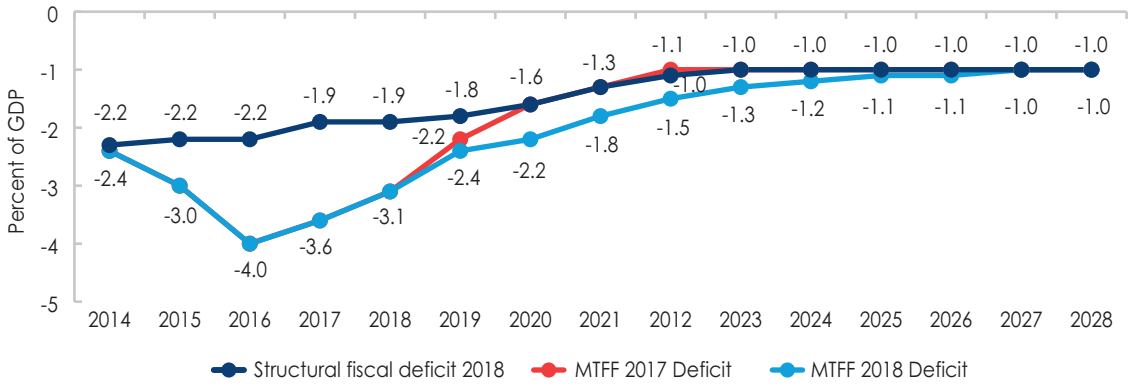
Colombia has considerable spending needs associated with infrastructure gaps, insufficient access to, and quality of, public services and the commitments associated with the post-conflict agenda. Addressing these needs, while at the same time safeguarding the hard-won fiscal discipline, will require a sustained reform effort. The fiscal consolidation consistent with the Fiscal Rule requires a decline in the central government deficit to 3.1 percent in 2018, to 2.4 percent of GDP in 2019, and 1.5 percent of GDP by 2022, consistent with reaching a structural deficit of 1 percent of GDP (Figure 0.9). This would entail achieving higher public spending efficiency, by identifying opportunities for savings and/or better outcomes, and ensuring long-term fiscal sustainability, including in the areas of social subsidies, health, education, and public procurement. Addressing shortcomings in the budget process could also increase the scope for allocative efficiency. On the revenue side, it is necessary to increase domestic resource mobilization, focusing on increasing direct taxation and limiting tax expenditures, while also achieving greater progressivity of fiscal policy. In order to reduce tax evasion and achieve the full impact of recent tax reforms, it is also necessary to accelerate the strengthening and modernization of the tax administration. (**Note 1**).

A comprehensive pension reform would contribute to fiscal sustainability and greater progressivity of public spending.[10] Combined with the parametric reform, the insured income in the RPM could be capped to disincentivize the arbitrage between the two pension schemes. Reviewing minimum pension policy and the increase in retirement age to allow time to meet the minimum pension requirements are policy options that need to be considered to increase coverage from the current very low levels. True old-age income insurance to allow consumption smoothing should be provided, by limiting lumpsum payments at retirement, including through non-pension instruments such as the periodic economic benefits program (*Beneficios Economicos Periodicos*, BEPs). Reforms are also needed to develop annuities markets, including the unbundling of the fee cap and the centralization of the provision of disability and survivorship insurance (**Note 4**).

Improved education and labor market programs are needed to produce a better qualified labor force and facilitate the successful transition from school to work. The education system exacerbates early childhood socioeconomic inequalities resulting in large inequalities in youth skills, which in turn lead to low labor market outcomes. Meanwhile the upper secondary education system does not equip

10 Pensions increase inequality in Colombia and have a pseudo-Gini coefficient of around 0.72.

Figure 0.9 Fiscal consolidation path under the Fiscal Rule



Source: Ministerio de Hacienda y Crédito Público, Comité Consultivo de la Regla Fiscal (2017, 2018).

graduates with the right skills for productive employment, and despite progress in access and equity, only a limited share of youth reaches tertiary education and attends programs of certified quality. Once in the labor market, youth lack adequate support for improving their employability. Ensuring successful school-to-work transitions can break the intergenerational circle of poverty and inequality. To help youth transition successfully to the labor market they need a better, more relevant set of skills. This entails better quality education throughout upper-secondary: improved access to and quality of early childhood development programs, improved quality of basic education, and a transformation of the upper secondary education system. An enhanced tertiary education quality assurance system is needed as well as a revised financing system to ensure increased access and quality. It also requires active and systematic support during their transition to the labor market, by increasing the coverage of existing programs, increasing the relevance of trainings for the labor market, and improving the coordination and financing system of program providers (**Note 3**).

Enhancing the quality of health care and health outcomes and ensuring the system's financial sustainability are critical for Colombia's development. More efficient spending and an increase in financing sources are needed to make the system sustainable. To create a health system focused on outcomes, the implementation of the integral model of healthcare should be prioritized, health insurers should be certified according to technical standards, and the IT structure of the system needs to be improved. These sources could include higher taxes on products with negative health impacts, such as sugary beverages and tobacco. The capacity of the institution in charge of administering these resources (ANDRES) also needs to be strengthened. New payment mechanisms and regulatory measures that adequately reflect costs and risks and provide incentives for improved financial performance and/or health outcomes could be considered. Finally, policy measures are needed to ensure the adequate and sustainable implementation of the right to health (**Note 6**).

Consolidating peace and reducing territorial gaps

The end of the armed conflict with the FARC has the potential to boost inclusive growth but the short-term expenditure pressures need

to be managed adequately. While improvements in security are critical to boost investment and growth, especially in lagging regions, it will only be sustainable if the process is accompanied by productivity-enhancing reforms. Implementing the post-conflict agenda (including narrowing the service delivery gaps in conflict-affected regions) is critical and will require considerable financial resources. Wide inequality in land distribution, the presence of the illegal economy, former combatant, the large numbers of victims of the conflict, and new forms of paramilitary violence are among the key challenges to ensuring sustainable peace. Many conflict and post-conflict Colombian municipalities are affected by massive displacement, forced abandonment of property and assets and land dispossession. Making sustained progress on this agenda, while complying with the Fiscal Rule, will be a challenge. Furthermore, increasing social mobility and equity while responding to a likely increase in demand for social services and programs in the post-conflict context will likely require increased efficiency and effectiveness of the social protection system and effective coordination of interventions to enhance service delivery and income generation capacity.

Making sustained and visible progress on the post-conflict agenda is critical. Building a sustainable peace requires timely responses to the most pressing problems, while also addressing the underlying socio-economic and political causes of the conflict. This includes the timely processing of land restitution claims, with better coordination among the agencies involved in the process. Land restitution, however, can only be successful if complemented by measures that ensure its sustainability, such as demining of surrounding areas, secure land tenure, and support for projects that ensure the productive use of land. Standardizing the legal provisions applying to successive waves of demobilized ex-combatants is also critical to facilitate reconciliation and reintegration. Greater harmonization is also needed between the different approaches to the problem of illicit crops. Forceful eradication and voluntary substitution measures need to be coordinated and linked to other rural development activities, particularly those under the Development Programs with a Territorial Focus (*Programas de desarrollo con un enfoque territorial*, PDETs). Finally, the validity period of the Victims' Law needs to be revisited, with the possibility of extending it beyond 2021. Efforts should focus on collective reparations, while ensuring that the public costs remain consistent with the fiscal adjustment path required by the Fiscal Rule (**Note 8**).

These interventions need to be complemented with actions aimed at fostering territorial development. These should focus on coordinating the already existing plans and tools of the different agencies and entities in charge of territorial development and simplifying and streamlining the processes. Policy recommendations consider a land administration system linked to an updated national cadaster, continued efforts to improve regional and local data, use of the concept of a portfolio of places, where public investment is guided by broad distinctions of territories according to function. Performance-based grants could be used to complement the current process of asymmetric decentralization. Furthermore, Colombia could consider strengthening inter-institutional territorial development coordination territorial development and streamlining territorial planning instruments. Investing in connective infrastructure is also critical. To bolster regional projects, it is necessary to improve investment planning, project structuring and project management capacities at the SNG (**Note 9**).

Social protection programs should be made more effective and efficient to further reduce poverty and increase shared prosperity, including in lagging regions. A dynamic and integrated social protection system would ensure that people access the adequate integrated package (with the adequate programs and amount) at the opportune time over the life cycle. Shifting towards a citizen-centered service delivery system could positively impact delivery performance, final outcomes and user satisfaction. With that in mind, improving the quality of demand-side information is critical. An integrated, more dynamic social registry containing information on the demand and supply for social benefits and services could further enhance efficiency and effectiveness gains in the determination of eligibility made with the roll-out of Sisben IV. To provide users with integrated packages of programs and services and improve the effectiveness of the system, it is critical to address program design issues that hinder a more effective coordination due to misaligned incentives, lack of harmonization, or lack of referral protocols (**Note 5**).

The institutional capacity of territorial governments to manage expenditure responsibilities and mobilize own-source revenue needs to be strengthened. High vertical and horizontal imbalances remain an outstanding challenge and negatively impact the quality of service delivery. The reform priorities to improve the intergovernmental framework include: (i) reviewing the delegation of expenditure responsibilities and only delegating functions to municipalities with the capacity to carry them out, while increasing their autonomy to manage such services; (ii) enhancing the capacity of departments and municipalities to raise own-source revenues, through updating and modernizing the cadastral and land registries, improving tax administration and reducing the number of earmarked taxes; (iii) adopting a single streamlined process for the preparation and selection of process across funding streams and reducing earmarking of capital transfers; and (iv) revising the transfer formulae to strengthen equalization (**Note 7**).

2018 Colombia Policy Notes

Note 1: Fiscal Policy
Note 2: Productivity
Note 3: Easing transition from school to work
Note 4: Pensions
Note 5: Social Protection System
Note 6: Health
Note 7: Subnational government financing and management
Note 8: Peace consolidation
Note 9: Territorial development
Note 10: Private financing of public infrastructure
Note 11: Financial sector
Note 12: Green growth

Table 0.1 2018 Colombia Policy Notes – selected policy options

Policy Area	Short-Term Options	Medium-Term Options
Diversifying the economy while attracting investment across sectors		
1. Improve regulatory, tax and tariff framework	• Maintain efforts to simplify administrative procedures • Revise regulations hindering development and market creation, competition, and integration with GVCs	• Make regulatory impact assessment mandatory for new regulations with an expected impact (threshold or triage system) • Reduce unnecessary non-tariff barriers based on cost-benefit analysis • Reduce tariffs on agricultural products • Decrease dispersion and improve efficiency of the tariff system • Create a special agency for regulatory quality improvement
2. Develop an efficient logistics sector	• Adopt implementing regulations for the new Customs Statute; define responsibilities and time schedule; and commit required budget of participating institutions • Approve CONPES document on logistics and guarantee financing for its effective implementation	• Make VUCE a true one-stop shop for foreign trade: incorporate all foreign trade operations, including instant inspections and advance declarations, and all operators in the country; and fully integrate it with main trade partners • Design instruments promoting innovation in logistics, entrepreneurship and ICT use among logistics services providers and users • Implement instruments to promote logistics services construction and operation (i. e., proyectos tipo) • Implement the National Qualifications Framework for the logistics chain (port and road freight logistics), and create appropriate training programs
3. Strengthen capabilities at the firm level	• Prioritize financing of PDP at all levels of government, with a direct mandate by the President's office to make it the roadmap for improving productivity • Promote private sector financing of PDP	• Implement Science Technology Innovation PER recommendations: reduce concentration of the STI budget; promote specialization within and across entities; rationalize or consolidate instruments; eliminate duplication in objectives and beneficiaries—all based on proper monitoring and evaluations systems • Scale up the technology extension pilot • Design and implement tailor-made programs, that are results-based and meet the need of individual firms
4. Reduce costs and increase benefits of business formalization	• Implement VUE in Bogota • Identify opportunities for lowering entry costs, labor costs, and regulatory costs • Create additional benefits to registered firms: access to database, accounting and mediation assistance • Revise the inspection and control strategy • Approve CONPES document on business formalization and guarantee its financing	• Implement VUE at the national level • Lower entry costs, labor costs and regulatory costs • Design and implement business development programs that allow access to formality benefits, targeted to firms with growing potential and revealed commitment of moving up the capabilities escalator

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Diversifying the economy while attracting investment across sectors		
5. Strengthen financial sector regulatory and supervisory architecture	• Rethink the structure of SFC and strengthen the independence of the superintendent • Strengthen the legal and regulatory framework to identify, monitor, and respond to cross-border risks and improve consolidated supervision • Finalize secondary regulation to improve the effectiveness of the conglomerates law, including regulations on the definition of 'groups', and holding companies; capital requirements for financial conglomerates; and exposure limits to related parties	• Strengthen FOGAFIN's bank recovery and resolution powers in a coordinated effort with URF and the SFC
6. Deepen capital markets	• Set up a "Blue Ribbon" Commission, of domestic and international experts, to develop a strategy for the deepening of Colombian capital markets, identifying top-down priorities, defining obstacles and offering a longer-term view	• Develop policy and regulatory changes to support a more diversified institutional investor base for long-term financing and improve liquidity of government bond market yield curve; and develop alternative asset instruments through securitizations • Promote MILA initiatives to increase domestic competition and bring new players to compete in the local market
7. Expand financial inclusion	• Encourage the growth of a well-regulated and supervised FinTech sector	• Promote the sustainability of financial sector operations in rural areas, with financial education at the forefront of this agenda • Deepen the impact of the secured transaction reform and evaluate options to create a second loss guarantee fund
8. Mobilize private sector financing	• Review governance of public and private pension funds (under conglomerates law) • Review investment framework for public pension funds (e.g. Fonpet) • Ensure financial sector regulations support financial innovations from the supply (offering/registration regimes) and demand side (investment regulations). • Support FDN in addressing market failures and financial innovations: FX hedging liquidity facility, pooling facility	

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Diversifying the economy while attracting investment across sectors		
9. Develop PPP programs for sectors	• Select sectors with strongest potential for private sector financing • Continue support for reforms in clean energy sector	• Design programmatic sectorial program of bankable projects: coordination between line ministries, MoF and DNP • Enhance PPP framework for eligible/selected sectors: risk matrix, contract standardization, expropriations, bidding process • Establish non-transport PPP implementation agency
10. Achieve climate-smart, sustainable and productive landscapes	• Finalize the national forest policy, implement the National Forest Service, including the creation of a high-level entity to develop, support and promote sustainable forest management • Improve and implement economic incentives to promote climate-smart agricultural practices, forest ecosystem restoration and conservation, water use efficiency, and GHG emission reductions • Emphasize capacity-building of environmental authorities and invest in programs that explicitly target environmental sustainability with revenues from the Carbon Tax	• Strengthen the incorporation of ecological and environmental concerns in land use planning efforts at all levels of government • Enable conditions to develop bio economy sectors and to scale up adoption of sustainable practices in agricultural production and agribusiness through research and knowledge dissemination and certifications
11. Renew the energy development model	• Establish clear policy, a regulatory framework and a competitive and transparent procurement framework for Non-Conventional Renewable Energy (NCRE) and Energy Efficiency	• Expand the suite of private financing options and investment vehicles for NCRE • Design and implement a rural electrification strategy to achieve universal access
12. Transition towards a green growth planning approach in Colombian cities and promoting a circular economy	• Implement targeted actions in the transport and industrial sectors to meet air quality norms and improve air quality information systems • Regulate wastewater discharges from non-domestic sources into soil and water	• Promote circular economy by updating and aligning regulations on materials and waste • Address important gaps in city cleanliness and health, through expansion of service regulation and a national investment program

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Ensuring fiscal sustainability and improving public services		
13. Increase public spending efficiency	• Conduct comprehensive reviews of quality, efficiency and effectiveness of public spending and identify potential savings • Account for all subsidies in the fiscal accounts • Make SECOP II use mandatory for all agencies, limit the use of non-competitive procurement methods and impose stricter limits on contract amendments • Prioritize the implementation of *Jornada Única* to the poorest, most vulnerable segments of the population; and improve targeting for the school feeding program *PAE* • Introduce stronger incentives to increase quality and reduce costs at health services provider level (*IPS*) and for the territorial authorities • Introduce reimbursement mechanisms that result in a more appropriate risk sharing by insurers and providers • Award contracts to EPS based on robust measures of quality and outcomes	• Unify recurrent and investment budgets • Adopt program budget and modern budgetary classification • Reduce/eliminate the dispersion of the procurement legal framework and make use of demand aggregation mechanisms mandatory for high-demand goods, including at subnational level • Put in place an integrated system of information of educational quality • Shift to a health model based on primary health care principles • Strengthen the technical capacity to evaluate the appropriateness of new technologies (IETS, *Instituto de Evaluación de Tecnologías en Salud*) as well as the regulation of medicines and their price-setting criteria by the Medicine Commission (CNPMDM)
14. Reduce tax evasion	• Strengthen control of the special tax regime for not-for-profit entities (*ESAL*) • Improve DIAN's investment in information technology to address the serious limitations of its information systems • Increase DIAN's autonomy in human resource management	
15. Increase tax revenues	• Review regulations for *Zonas Francas* • Broaden the tax base of the personal income; reduce PIT-related tax expenditures; adjust the tax schedule • Increase progressivity of dividend taxation	
16. Enhance subnational government own source revenue	• Update the cadasters • Put in place a common information management platform	• Conduct a comprehensive review of the subnational tax system to simplify and adequate the structure, tax design, procedural code, as well as the sanction framework • Replace ICA with a more efficient and simpler tax • Eliminate low revenue generating sub-national taxes, or replace them with a single tax

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Ensuring fiscal sustainability and improving public services		
17. Improve early childhood education (ECD), basic education and upper secondary education	• Introduce Quality Assurance System for ECD • Improve use of information for decision making (*Sistema de Gestion de la Calidad Educativa*) • Strengthen pedagogical support programs - PTA, *Jornada Única* and School Leadership Training • Strengthen socioemotional skills of graduates • Support transitions (subsidies and academic support, skills leveling)	• Include in the general transfer system the basic cost of ECD provision • Consolidate transfers and grant more autonomy for schools • Reform the Upper Secondary education: create graduate profiles, develop a teacher profile; improve pedagogy and management; pedagogical transformation
18. Improve tertiary education	• Introduce a Quality Assurance System for tertiary education • Pilot income-contingent student loans • Establish performance-based transfers to public institutions	• Based on a pilot, implement income-contingent student loans on a large scale • Move most financing to public institutions to be performance-based
19. Strengthen labor market transitions	• Unify targeting mechanisms for labor market programs • Involve private sector in skills training	• Consolidate youth programs by creating a Youth Policy Framework and Institutional Consolidation • Establish a Skills Agency with strong private sector leadership • Reform and consolidate financing by linking financing to performance
20. Reform the pension system	• Introduce parametric reforms of the public pillar (regimen de prima media, RPM): eliminate gender gap in retirement ages / increase retirement age; reduce pension accrual rate; review the generosity of special pension regimes. • Introduce insured income ceiling in RPM • Unbundle regulatory requirements for annuity provision from regulations for other financial services • Centralize auction of the insurance of disability and survivorship	• Review minimum pension policies • Mandate conversion of lump sum payments of old age savings into periodic payments
21. Improve efficiency and financial design of the health system to ensure financial sustainability	• Design payment and regulatory measures aimed at refining the relationship between insurers and providers	• Introduce new sources of financing • Strengthen and expand the regulatory and supervision capacity of key stakeholders, in areas such as medications, financial management and information analysis

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Ensuring fiscal sustainability and improving public services		
22. Steer the SGSS towards a system focused on outcomes	• Prioritize the implementation of the MIAS	• Design and implement a human resource for health strategy • Design and implement a specific policy for public hospitals
23. Implement the right to health in an adequate and sustainable way	• Establish a channel of dialogue with the judicial sector and other stakeholders and provide clear information for these decision-makers	
Consolidating peace and reducing territorial gaps		
24. Improve the quality of demand-side information for social protection programs	• Conduct a new round of Sisbén data collection • Implement mechanisms (and supporting operational processes) for continuous update of Sisbén data through (i) user provided (self-reported) information; and (ii) administrative data exchange (interoperability) • Implement social contract with potential users of social programs/services and introduce citizen-centered principles for interface with users	• Consolidate a dynamic social registry through interoperability of administrative data and social contract for self-reported data • Improve use of Sisbén data and information by social programs for targeting (beyond score, use socioeconomic characteristics captured by Sisbén, as relevant) • Strengthen the role of municipalities as the key citizen-government interface while maintaining policy and guideline setting role of the central government, and consolidate citizen-centered principles for interface of Sisbén with users
25. Improve the effectiveness and coordination of social protection programs	• Review individual program design; focus on alignment of incentives, opportunities for harmonization, and complementarity. Introduce citizen-centered principles for interface with users • Strengthen cross-sectorial coordination arrangements to facilitate data exchanges for decision making and improved service delivery (e.g. with Sisbén) • Strengthen the use of *Llave Maestra* to support (i) referral of potential users to complementary services; and (ii) monitoring	• Design packages of services centered on families' needs and profile and supported by referral protocols and agreements across programs • Implement data exchange from programs back to Sisbén for data analysis and service delivery purposes • Introduce protocols to facilitate automatic referrals to complementary programs or eligibility status (not enrollment) for users of programs with same eligibility requirements, to avoid duplicating processes • Promote capacity building at the municipal level for integrated delivery of social protection programs and services

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Consolidating peace and reducing territorial gaps		
26. Enhance the efficiency of subnational spending and focus on results	• Introduce an asymmetric assignment of responsibilities that delegates more functions to municipalities with the capacity to fulfill them, while in the municipalities where capacity is absent departments retain service delivery functions. • Simplify transfers and grants reporting mechanisms for small municipalities to alleviate their administrative burden and incentivize compliance • Reduce earmarking in the business and gasoline taxes and increase the flexibility to execute expenditures (for subnational governments with higher capacity) to increase autonomy the delivery of services	• Improve central monitoring and evaluation system of local service delivery outcomes • Increase financial support for institutional building at the departmental and municipal level • Introduce results-based grants to incentivize improvements in local service delivery • Simplify and streamline the budgetary system at the central and subnational levels • Implement a single integrated financial management information system for subnational entities (i.e. Guatemala and Mexico)
27. Improve the quality of the design and selection of subnational investment projects	• Simplify the General Adjusted Methodology and differentiate appraisal methodologies according to the size or complexity of projects • Establish a facility to provide technical assistance to low-capacity departments and municipalities in the preparation of medium-size and large investment projects • Introduce matching grants/especial incentives to finance subnational projects that undergo a more rigorous appraisal and selection process for medium-size and large projects • Increase financial incentives for regional cooperation across jurisdictions to strengthen in particular functional metropolitan areas • Reduce the earmarking in transfers and improve targeting of resources	• Improve the links between planning and budgeting at the central and subnational levels • Create a program to support systematic capacity building for public investment management at the subnational level • Simplify the system to approve and monitor the projects financed by the SGR

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Consolidating peace and reducing territorial gaps		
28. Increase own source revenue mobilization to reduce transfer dependency and increase local accountability	• Reduce the number of earmarked taxes • Provide funding and technical assistance to enhance the capacity of municipalities to raise property taxes, including updating and modernizing the cadastral and land registries • Pass a new departmental and municipal tax code defining tax bases and establishing ranges of rates. • Allow municipalities to use instruments such as congestion charges or tolls. • Promote more flexibility in the administration of user tariffs and local fees and optimize income from properties (rents, dividends) • Revise the business tax to reduce distortions • Unify excise tax rates and gasoline surcharges.	• Provide additional revenue-raising powers to the largest departments and municipalities (within establish parameters) • Streamline the portfolio of taxes levied by departments and municipalities and promote shared taxation between the central and subnational governments • Provide technical assistance to departmental and municipal tax administrations • Provide a common information management platform for tax administration/collection
29. Ensure that governments with different fiscal capacities have equal ability to provide basic public services	• Establish a regional measure of well-being • Review the allocation formulae for SGP and SGR to account for population changes, disparities in regional well-being, and the gap between resources and mandates to deliver basic public services	• Simplify the intergovernmental fiscal framework and establishing a comprehensive strategy to guide the sequencing of the decentralization reforms
30. Ensure adequate land restitution for victims	• Strengthen productive projects measures in restituted land • Establish a protocol for dismantling the economic and political structures that have supported the dispossession of land, and consolidate a judicial police team specialized in land matters	• Process in Congress an extension of the Law 1448, supporting such request with the figures related to the universe of land restitution claims, the analysis of security conditions, and the pace of implementation of the restitution claims • Set up for each one of the entities involved in the restitution process (IGAC, SNR and ANT) an action plan with activities, products, baseline, indicators, goals, and budget
31. Ensure the effective reintegration of ex-combatants	• Harmonize the legal framework for demobilization and reintegration	

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Consolidating peace and reducing territorial gaps		
32. Eliminate illicit crops	• Harmonize voluntary substitution and forceful eradication approaches • Link the Development Programs with a Territorial-Based Focus and the National Program for the Substitution of Illicit Crops	• Strengthen the coordination between the Directorate for the Substitution of Illegal Crops and the Ministry of Defense
33. Ensure adequate reparation of victims	• Ensure a sustainable and fiscally-sound implementation of the Victims' Law, focusing on collective reparations	• Extend the period of validity of the Victims' Law by at least 10 years beyond the current limit of, and revise the eligibility criteria for individual victims in order to focus on the most affected
34. Develop and operationalize a system to support robust decision-making in territorial development	• Continue the land administration reform from the previous administration and move forward with the national property cadaster policy • Continue and strengthen Terridata's efforts to collect and standardize local and regional data for policy monitoring and evaluation	• For the water sector, integrate information systems and improve capacity to collect and organize data on regional and local trends • Identify opportunities for closing territorial gaps and improving sectoral competitiveness, review the agricultural sector based on territorial analysis
35. Strengthen coordination among institutions in charge of territorial development and streamline territorial planning instruments	• Clearly define the institutional setup that guides the territorial development agenda	• Strengthen ANT's capacity at national and subnational level to provide land tenure services throughout the country in an effective manner • For the water sector, operationalize the National Water Council • Provide economic incentives to strengthen the POT modernos, and continue with technical capacity building to improve performance of SNGs • Use Contratos Plan as a tool for departments to have a stronger role in promoting cooperation for investment projects with a regional focus
36. Develop a portfolio of programs, incentives, and investments adapted to the differential needs of territories and based on practical considerations	• Implement the Territorial and Land Use Planning General Policy (PGOT), emphasizing the concept of a portfolio of places where public investment will be driven by practical considerations	• Use performance-based grants as a tool to complement the current process of asymmetric decentralization • As more urban municipalities build their capacities for local revenue generation, use LVC and PPPs for infrastructure financing • Strengthen FINDETER's efforts to achieve more balanced territorial development by lending to a wider variety of SNGs

Table 0.1 2018 Colombia Policy Notes – selected policy options (cont.)

Policy Area	Short-Term Options	Medium-Term Options
Consolidating peace and reducing territorial gaps		
37. Invest in connectivity infrastructure		• Give national government a more active role in supporting the development of urban transport through the National Urban Transport Program (NUTP) • Define a resource framework for the stable financing of the road sector under public management, and continue with private sector participation through toll road concessions in high traffic corridors • Improve investment planning, project structuring and project management capacities at the SNG level to ensure that projects generate impacts at the regional level • Implement the recommendations of CONPES for the management of tertiary roads

NOTE 1

FISCAL POLICY

Prudent macroeconomic management helped ensure a gradual adjustment to the significant terms of trade shock of mid-2014-2015, but important fiscal efforts are still needed to safeguard fiscal sustainability. Significant development needs, including those related to the post-conflict, need to be met while at the same time ensuring continued fiscal consolidation. Meanwhile, higher public investment is needed to help bolster growth in the medium term. Achieving higher public spending efficiency and greater progressivity of fiscal policy represent key challenges. Tax revenues, including at the subnational level, remain low as a share of GDP despite the 2016 tax reform. Furthermore, the tax system exacerbates income inequality and has large horizontal inequities, affecting economic efficiency. Meanwhile, fragmentation of the budget process, high spending rigidities, the lack of a comprehensive view of public investment, and the lack of modern budgetary classification further limit the scope for allocative efficiency.

Policy options that would help address these key challenges include the following. Additional in-depth reviews of quality, efficiency and effectiveness of public spending are critical for identifying opportunities for savings/increased spending efficiency and to ensure long-term fiscal sustainability, including in the areas of social subsidies, health, education, and public procurement. In parallel, efforts are also needed to raise additional tax revenues and to increase the progressivity of the tax system. The government could consider reviewing the tax bases of direct taxes, the tax schedule for personal income tax, and limiting tax expenditures. A comprehensive review of the subnational tax system is needed, to simplify and adequate its structure and tax design. Furthermore, cadasters and land registries need to be updated to support subnational own-resource mobilization. Accelerating the implementation of tax administration reforms would help reduce tax evasion and reach the full domestic revenue mobilization impact of the 2016 tax reform.

Context and Reform Progress

Colombia's record of prudent macroeconomic and fiscal policies has contributed to economic stability and has allowed the economy to adjust gradually to the large oil income shock of mid-2014-2015. A sound macroeconomic framework, characterized by inflation-targeting and a flexible exchange rate, supported robust and resilient growth over the past 15 years and helped Colombia achieve and maintain investment grade rating. The introduction of the

Fiscal Rule further strengthened this framework and facilitated a gradual adjustment to the significant decline in oil revenues experienced over the 2014-2016 period[1], helping protect critical social spending and ensuring compliance with the Fiscal Rule.

Important additional fiscal efforts are needed to ensure fiscal sustainability in the context of structurally lower oil revenues. Macroeconomic stability and fiscal discipline (including compliance with the Fiscal Rule) are fundamental for sustained growth and for safeguarding Colombia's investment grade rating. The Fiscal Rule, which was introduced in 2012[2], targets a 1 percent structural deficit by 2022 (Figure 1.1). The structural deficit adjusts for the economic cycle[3] and the oil price cycle[4], which in 2017 were estimated at 0.5 percent of GDP and 1.2 percent of GDP, respectively, for a total cycle of 1.7 percent of GDP. With a structural deficit target of 2 percent of GDP established by the *Comité Consultivo de la Regla Fiscal*, the fiscal deficit of the central government allowed under the Fiscal Rule in 2017 was 3.7 percent of GDP, which was met.[5] Given weaker than expected economic performance and a higher negative output gap in 2017, the Fiscal Rule now allows for a more gradual adjustment to the headline central government deficit between 2018 and 2022 of 1.6 percent of GDP, instead of 2.0 percent of GDP previously. Meanwhile, tax reforms passed in 2014 and 2016 designed to compensate for part of the loss in oil revenue have yet to reach their expected revenue impact[6], with the tax-to-GDP ratio remaining one of the lowest in the region. Colombia has reduced primary expenditure by nearly 0.8 percent of GDP between 2013 and 2017[7], but there is room for additional spending measures.

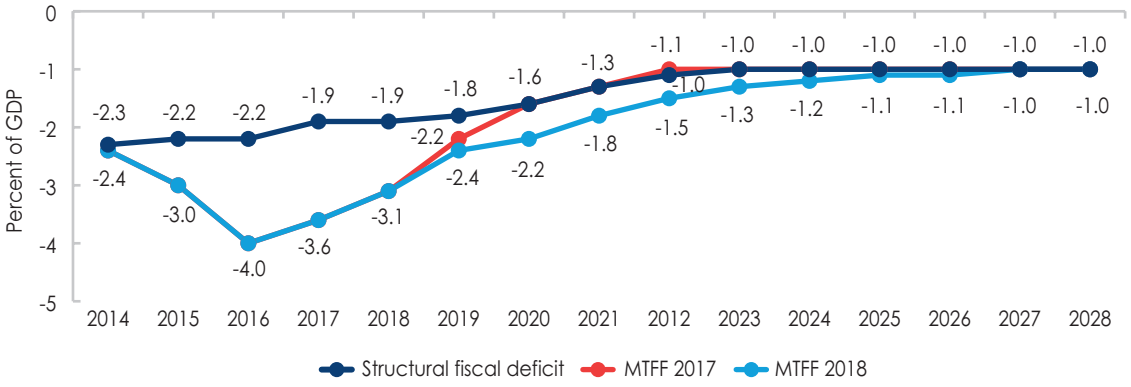
Colombia has considerable social and infrastructure spending needs, which have become even more critical post-conflict. Spending commitments associated with the end of the conflict include compensation and reparation under the Victims' Law, land restoration and other agreements related to the peace process[8], and investments to close the service delivery gap in regions affected by conflict.[9] The government also needs to protect capital spending to sustain medium-term growth. Revenue and expenditure policies must be consistent with the deficit reduction path mandated by the Fiscal Rule.

Main Challenges

Colombia needs to further consolidate its fiscal accounts in the context of structurally lower oil revenues and additional expenditure pressures

1 Central government revenues declined by approximately COP24 trillion or 3.4 percentage points of GDP between 2013 and 2016.
2 Law 1473 (2011).
3 The economic cycle is determined as the non-oil tax revenue gap relative to potential. The elasticity of non-oil tax revenues to GDP is estimated at 1. The economic cycle component was estimated at 0.5 percent of GDP in 2017.
4 The oil cycle is determined by multiplying the marginal oil revenue with the deviation of Brent oil prices in t-1 from the long-term prices, calculated as a nine-year moving average centered in the year of the analysis (4-1-4). The oil cycle component was estimated at 1.2 percent of GDP in 2017 by the Fiscal Council.
5 The fiscal deficit was 3.6 percent of GDP.
6 The tax reform enacted at the end of 2016 was expected to increase central government revenues gradually by a cumulative 3.1 percentage points of GPD by 2022. However, the effect was lower than expected, partly due to the continued economic slowdown which depressed VAT revenue in particular.
7 The government reduced general spending, froze public employee numbers, and cut public investment. The number excludes the 0.3 percent of GDP used to constitute reserves from the COP 4.3 trillion or 0.5 percent of GDP fees received by the government in 2017 from Claro and ColTel (*laudos*).
8 See Policy Note #8 on Peace Consolidation.
9 See Policy Note #8 on Peace Consolidation for a more detailed discussion of the post-conflict commitments.

Figure 1.1 Central Government deficit path under the Fiscal Rule



Source: Ministerio de Hacienda y Crédito Público, Comité Consultivo de la Regla Fiscal.

arising from the peace consolidation process, while ensuring greater progressivity of its fiscal system. Compliance with the Fiscal Rule requires a sizeable 0.7 percent of GDP reduction in the central government deficit in 2019.

Public spending

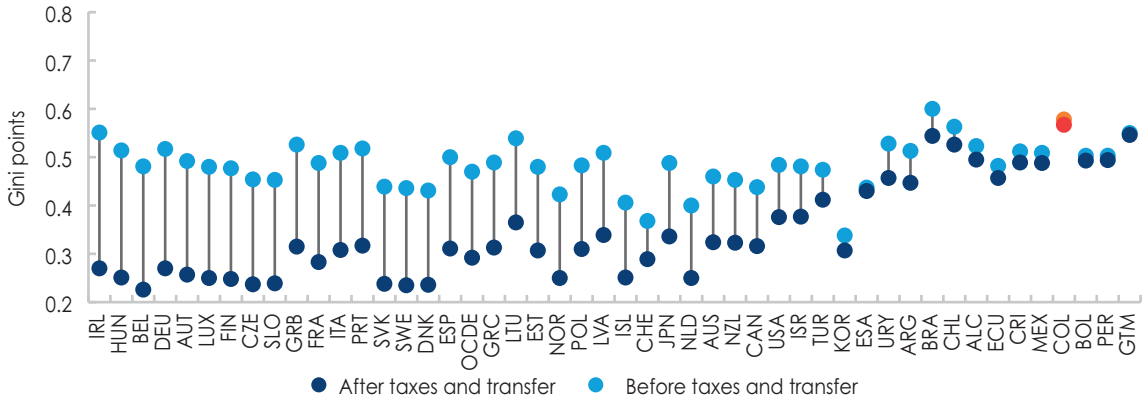
Weak progressivity of public spending

Public expenditure does not contribute to a reduction in inequality. Public social spending is relatively low as a share of GDP compared with OECD peers and redistributes relatively little.[10] Spending on pensions is very regressive, estimated to increase the Gini coefficient by 1.63 percentage points[11], with less than 6 percent of pensions accruing to poor households.[12] Central government spending on pensions increased rapidly after 2005, reaching 3.7 percent by 2017, to finance the deficit in the pay-as-you go pillar. Spending on pre-school, primary and secondary education contributes to reducing inequality, however spending on tertiary education is regressive. Public spending on health contributes to reducing inequality, although higher income deciles also benefit from it. Overall taxes and transfers in Colombia reduce the Gini coefficient only marginally, significantly less than in OECD countries (Figure 1.2).

Progressive spending items represent only a small share of GDP. Old-age income support for the poor (*Colombia Mayor*) is progressive, and coverage has increased significantly in recent years to 1.5 million people, but the benefit is small, ranging from 7 to 12 percent of the minimum wage.[13] This represented around 0.13 percent of GDP in 2016. An impact evaluation of the program shows that the program is well-targeted and effective.[14] Social welfare programs like *Red Unidos, Más Familias en Acción, Jóvenes en Acción*, are well-targeted but they are relatively small as a share of GDP and of government spending. Spending on subsidies[15] for the recently-introduced individual retirement accounts *Beneficios Económicos Periódicos* (BEPS) is still very small, as a result of limited up-take.

10 OECD (2017).
11 Nunez (2009).
12 Lustig and Melendez (2014).
13 OECD (2016).
14 Econometría (2016).
15 The government subsidizes 20 percent of the contributions by low-income individuals.

Figure 1.2 Inequality as measured by the Gini coefficient, before and after fiscal policy



Source: OECD (for OECD countries), Lustig 2016 (for LAC countries).

Table 1.1 Distribution of social subsidies by income quintiles

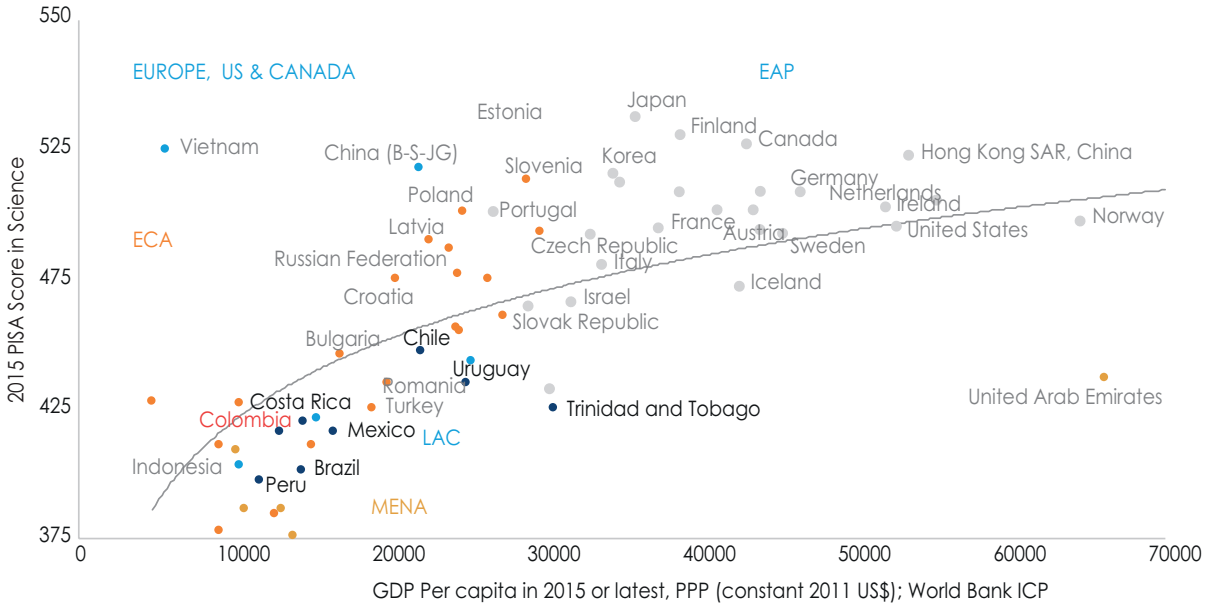
	Share of GDP	1	2	3	4	5
Education (incl. training)	3.0%	25.7%	23.4%	21.4%	18.1%	11.4%
Pensions (incl. Colombia Mayor)	2.3%	4.3%	7.8%	13.7%	23.4%	50.8%
Health	1.9%	33.7%	23.6%	19.7%	15.1%	8.0%
Public services	0.7%	21.8%	23.2%	22.9%	20.4%	11.7%
Poverty	0.5%	33.4%	23.0%	15.0%	17.2%	11.5%
Early Childhood	0.4%	32.0%	27.2%	22.1%	15.4%	3.2%
Housing	0.2%	11.3%	22.5%	29.6%	26.6%	10.0%
Others	0.2%	48.7%	35.7%	7.5%	5.4%	2.6%
Total	9.0%	22.4%	19.9%	18.8%	18.8%	20.2%

Source: DNP 2015.

Overall, social subsidies are not well-targeted. Colombia spent the equivalent of 9 percent of GDP (or 35.4 percent of central government revenues) on social subsidies in 2015, an increase of 44 percent since 2010, financing 62 social programs. Overall, the targeting of these subsidies was not adequate: the top quintile of the income distribution received 20.2 percent of the subsidies, compared with 22.4 percent for the lowest income quintile.[16] The Gini coefficient was reduced by only 0.01 points after these monetary subsidies. This negative result is primarily driven by subsidies to pensions, which are highly regressive, and represented close to 28 percent of the subsidies. Almost 75 percent of pension subsidies benefit the top two quintiles of the population, with only 12 percent accruing to the lowest two income quintiles.

16 DNP (2015).

Figure 1.3 Education performance



Source: EduStats, PISA, and Education at a Glance (OECD).

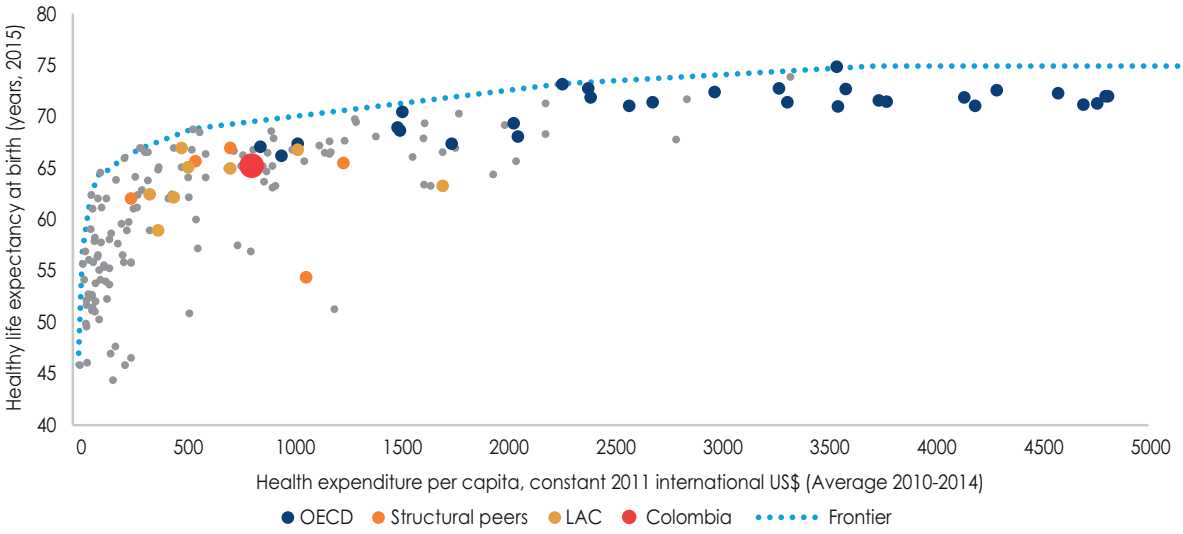
Spending efficiency is low, especially in health

Spending inefficiencies in the education sector remain. Per student spending is in line with what is expected given the country's income level, but educational outcomes are lower than that of OECD peers. Expenditure on early childhood education (EIAIPI) is still low[17], and the enrolment rate (at age 4) is lower than in peer countries. It is particularly low among poor families and in rural areas. Staff compensation as a share of expenditure is higher in Colombia than in peers, at all levels, except for tertiary education. Colombia has had a sustained focus on quality improvements over the past decade[18] and made notable gains in science, math, and reading since 2012, yet only 33.7 percent of 15-year old students in Colombia score at or above proficiency requirements in mathematics (according to PISA), less than the LAC regional average and significantly lower than that of OECD countries (76.6 percent) (Figure 1.3). Repetition rates remain relatively high, and the cumulative drop-out rate to the last grade of lower-secondary is high compared with regional peers and OECD countries (30.9 percent as of 2013). Moreover, the quality of education, as measured by the simple average of math, language, and science scores (SERCE and TERCE) has not changed significantly between 2006 and 2013.[19]

Public spending on health is progressive, but issues of quality and inefficient spending persist. Colombia's gains in terms of health outcomes lag that of some of its peers (Figure 1.4). Furthermore, rapid increases in public health spending in recent years can threaten the fi-

17 Additional financing of early childhood education by the large municipalities could allow ICBF to focus the resources it manages in the municipalities with lower institutional and financial capacity, including rural areas.
18 Colombia has a strong culture of learning assessments with annual assessments of 3rd, 5th, and 9th grade students since 2012.
19 See also Policy Note #3 on School to Work Transitions.

Figure 1.4 Health expenditure and healthy life expectancy at birth



Source: WDI, staff calculations.

nancial stability of the General System of Social Security in Health (SGSSS). The Colombian health system is also covering costs for medicine and medical procedures that are not clearly aligned with its health priorities.[20]

Despite improvements, the public procurement system continues to face issues that limit its efficiency. General government public procurement affects a significant share of public spending, equivalent to 13.4 percent of GDP and 35.7 percent of general government expenditure. Colombia has made significant progress in recent years in strengthening the performance of the procurement system, with the creation of a Procurement Directorate (*Agencia Nacional de Contratación Publica Colombia Compra Eficiente*, CCE); the implementation of the transactional procurement system (SECOP II); the adoption of a more strategic approach to procurement as an essential component of public sector expenditure management; a growing use of Framework Agreements for the procurement of important goods and services; the design of standard bidding documents for specific activities and the professionalization of procurement staff. Nevertheless, the efficiency of the Colombian system of public procurement is affected by limited competition, complex regulations, limited development and managerial capacity of the actors participating in the public procurement system, limited access to real time information, and registries duplicity of potential suppliers.

Revenues

Tax revenues are insufficient

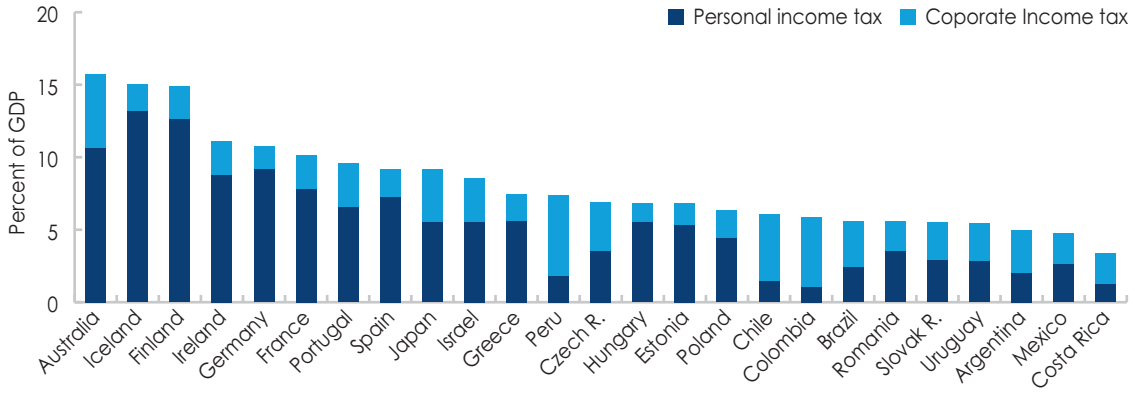
Tax revenues as a share of GDP remain low despite the tax reform approved in 2016 and are expected to decline further under a "business as usual" scenario. General government tax revenue is below that of OECD countries and some of Colombia's regional peers, with

20 Spending and Public Investment Commission (2018). See also Policy Note #6 on Health.

the tax burden gap[21], controlling for its level of economic development and structural characteristics, estimated to be around 4 percentage points of GDP.[22] General government tax revenues as share of GDP in OECD countries stood at 34.3 percent in 2016, compared with 19.9 percent in Colombia. Income tax revenues, especially from personal income tax (PIT), are low as a share of GDP, (Figure 1.5), and tax benefits for personal income tax, including exempted income and tax discounts accounted for 59.5 percent of income tax and CREE collections in 2016. Meanwhile, the high corporate income tax burden is declining, as the income tax for equity CREE (Law 1607 2012) was repealed, and the surcharge, and wealth tax gradually sunset.[23] So far, the slower-than-expected pace of reforms at the tax and customs administration (DIAN) and weaker-than-expected private consumption has delayed achieving the full revenue generating potential of the reform. Even if the 2016 tax reform does generate a cumulative 3.1 percentage points of GPD by 2022, as the government expected, central government tax revenues will remain relatively low at 16.1 percent of GDP.

Subnational tax revenues are lower compared to other countries with similar levels of decentralization. Subnational tax revenues make up about 18 percent of total tax revenue, with municipal and departmental revenues representing 3.3 percent of GDP. Tax revenues are concentrated in a few jurisdictions (primarily large cities) and around two-thirds are earmarked to specific sector expenditures. Bogotá, Medellín, Cali, Barranquilla and Cartagena concentrate almost two-thirds of total municipal revenues. Property taxes made up about 21 percent of subnational tax revenues[24], economic activity taxes represent close to 50 percent, and other taxes (tax stamps, taxes on sports and entertainment events, a public contractors' contri-

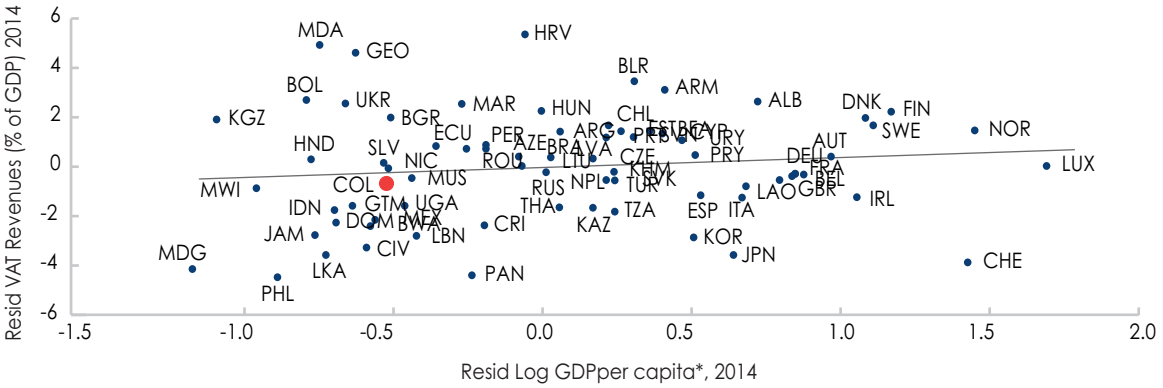
Figure 1.5 Income tax revenues, 2010-2014 average



Source: WoRLD.

21 The "gap" is defined as the excess or deficit in tax collections with respect to international patterns, controlling for GDP, the proportion of population under 15 years of age and over 65, percentage of the labor force that is self-unemployed, coefficient of exports and imports with respect to GDP, and coefficient of rents from natural resources with respect to GDP.
22 IADB (2013).
23 The surcharge declines from 6 percent to 4 percent in 2018, and drops to 0 in 2019, and the corporate income tax rate declines from 34 percent to 33 percent in 2018. The wealth tax revenues will drop by close to 0.2 percentage points of GDP in 2018
24 Data for 2000-2009 period.

Figure 1.6 VAT revenues by country



Source: WoRLD and WB staff estimates.

butions) represent 15.2 percent. At the same time, some local taxes generate significant compliance costs for taxpayers. Compliance costs for the local business tax ICA for an average business in Bogotá can add up to 2.3 percent of its turnover. Law 1819 of 2016 (the structural tax reform) included some provisions to improve the ICA, including: (i) definitions of territoriality for the activities included in ICA; (ii) a unique national ICA tax form; (iii) a broader network of banks where taxes can be paid; and (iv) authorization to municipalities (*Consejos*) to introduce a preferential system for ICA for small businesses.

The tax system has large horizontal inequities and exacerbates income inequality

The tax system is characterized by a high degree of horizontal inequity. This inequity has distortionary impacts that prevent the creation of a level playing field necessary to support greater diversification and higher productivity.[25] There are significant differences in effective tax rates across sectors, industries and even companies, as a result of numerous tax exemptions, non-taxable income, tax deductions, discounts and special tax regimes (including Special Economic Zones[26]). Some firms benefit from "juridical stability" contracts that protect them from subsequent changes to the tax regime, locking in permanently lower tax rates, larger deductions, and exemptions that are no longer applicable to other firms. In addition, wide-spread tax evasion represents a form of unfair competition. Estimates suggest that evasion could amount to around 4 percent of GDP for the income tax and VAT alone.[27] There is also wide-spread abuse of the special taxation regime for non-profits, which is designed for certain organizations with a social objective but used by a wide range of entities that do not necessarily comply with the eligibility criteria. The evasion rate for the income tax for companies, although one of the lowest in the region, was estimated at 38.9 percent on average from 2007 to 2012, with an average fiscal cost of 2.5 percent of GDP.[28] Common evasion techniques include: holding assets in and shif-

25 See Policy Note #2 on Productivity.
26 DIAN estimated that the fiscal cost of the lower tax burden for the *Zonas Francas* averaged COP168 billion for the 2012-2013 period, benefiting less than 600 companies.
27 Steiner and Medellin (2014).
28 Avila and Cruz (2015).

ting revenues to low tax jurisdictions; omitting to declare assets and/or revenues; or inflating liabilities and/or spending. Not charging or declaring VAT is also a widespread evasion practice. According to some estimates, the VAT evasion in Colombia is around 40 percent;[29] official estimates put the evasion rate at 23 percent (equivalent to 2 percent of GDP). The widespread use of cash facilitates tax evasion, as it reduces the traceability. These factors result in important market distortions and contribute to resource misallocation.

Taxes do little to reduce inequality in Colombia. Colombia is the country with the second highest income inequality in the region. Consumption taxes, which tend to be regressive, have a disproportionately large weight in overall tax revenues. General taxes on goods and services represent around 37.6 percent of total tax revenues in Colombia, compared with an average of 32 percent of GDP in the OECD. Despite reduced rates for products of the basic consumption basket, the VAT is overall regressive.[30] As for direct taxes, collections from the personal income tax, at less than 1 percent of GDP, are low in comparison with the OECD average of 8.5 percent, and represent only 15 percent of total income tax collections. The tax reform did little to broaden the base of the personal income tax, and with an effective rate that is almost flat around 5 percent along the income schedule, the tax lacks progressivity. In fact, the exemption of pensions from the personal income tax[31] benefits the people with higher incomes, given that pensions accrue disproportionately to the highest deciles and are, in addition, highly subsidized.[32]

The tax administration (DIAN) has inadequate resources to effectively fight tax evasion

DIAN is facing significant weaknesses, which hamper effective and efficient tax collections. The administration suffers from organizational, institutional, information technology, and human resources shortcomings that enable tax evasion and foregone tax revenue. Limitations in DIAN's technological and institutional capabilities create challenges, for example to issuing electronic receipts properly and to processing and analyzing the information. Furthermore, lack of adequate capacity and resources has created long delays in issuing the regulation necessary for the full implementation of many aspects of the 2016 reform, which generated some legal uncertainty.

Shortcomings in the budget process affect the implementation of policy priorities

There are important shortcomings in the budget process that limit the scope for allocative efficiency. Colombia's budget is characterized by high spending rigidity, linked to the earmarking of revenues; legal and constitutional norms that impose minimum spending limits; pre-committed investment spending (*Vigencias Futuras*); and legal claims (*tutelas*). According to CEPAL, close to 80 percent of spending is rigid, with rigid expenditure including personnel expenditure, transfers and interest payments. Only Costa Rica and Argentina fare worse in the LAC region. To circumvent some of these budget rigidities, various mechanisms are used that result in lower budget transparency, including the wide-spread use of contract workers in the public sector. Furthermore, the budget process is fragmented, with separate processes

29 OECD (2015).
30 IADB (2013). The increase in the VAT rate to 19 percent, while important for revenue generation, is likely to have further contributed to the regressivity of indirect taxes.
31 Pensions lower than 50 times the minimum wage are exempt from the PIT, which in practice implies that almost all pensions are exempt.
32 See Policy Note #4 on Pensions for a more detailed discussion.

for recurrent and investment spending, led by different agencies (Ministry of Finance and National Planning Department), respectively. There is also no comprehensive view of investment spending at the national and subnational levels, and across the different financing sources like the General Participations System (*Sistema General de Participaciones*, SGP) and royalties (with the latter following a separate, multi-year budget process with different rules). The lack of modern budget classification impedes programmatic budgeting, as well as the assessment and control of implementation of these programs. Overall, these negatively affect the allocation of budgetary resources to respond to policy priorities, and make it difficult to assess public spending efficiency and effectiveness.

Policy Options

Additional fiscal measures are needed both on the expenditure and on the revenue side. Such measures are critical to create space for post-conflict costs, to protect critical social spending, and avoid further cuts to public investments, and at the same time ensuring compliance with the Fiscal Rule.

Conduct comprehensive reviews of quality, efficiency and effectiveness of public spending; identify opportunities for savings/increased spending efficiency

Social subsidies should be evaluated to ensure that they are equitable, efficient and effective. A standard evaluation process (approved by CONPES) should be established and targeting mechanisms reviewed and improved. These evaluations should ensure that the subsidies are justified, cost-effective, and do not have unwanted effects on behavior. Subsidy programs with similar objectives should fall under the responsibility of the same entities to facilitate spending traceability and evaluation, while also avoiding duplications. In order to correctly target these subsidies, rigorous technical criteria should be applied. Subsidies should be adequately recorded in a standardized manner across entities, for example by recording the operating and administrative costs separately, to facilitate a quantification of the overall level of spending on subsidies. All subsidies should be accounted for in the fiscal accounts (including cross-subsidies for household consumption of public services; subsidies to families through *cajas de compensaciones*; and others).

Improvements in procurement systems, practices and regulations could contribute to greater expenditure efficiency. To increase efficiency of public procurement, the following is required: (i) the proposed Procurement Law should reduce/eliminate the dispersion of the current legal framework for procurement; (ii) all agencies need to transition to using SECOP II to improve availability of workable information for strategic decision-making processes; (iii) the use of non-competitive methods should be limited[33]; (iv) the use of demand aggregation mechanisms such as Framework Agreements could be extended to goods for which there is high demand by the state, including at subnational level, and should be mandatory for all levels of government (for example, the centralized procurement of medicines could be expanded to achieve cost savings). There should be stricter limits to modifying contracts, and the scope for contract renegotiations should be limited to exceptional situations, as renegotiations can reduce or eliminate the benefits of competitive processes. Prohibitions and conflicts of interest should be clearly defined, generally and for public employees. The

33 Activities following non-competitive methods accounts for almost 60 percent of public procurement.

Unique Supplier Directory (*Directorio Único de Proveedores*), administered by *Colombia Compra Eficiente*, as a dynamic information system for the public procurement system should be used, incorporating also information about suppliers' activities. The platform also should have interoperability with state accounting and financial information to ensure greater transparency and accountability.

There is room to increase efficiency in public spending in education. To increase quality of spending on early childhood education, a more structured curriculum for the Initial Education and Integral Attention to Early childhood (*Programas de Educación Inicial y Atención Integral a la Primera Infancia*, EIAIPI) should be used and teacher training, technical support and continued professional development for teachers need to continue. Spending efficiency in education could be supported by improving the quality of teaching and school administrators; professionalizing the teacher career path[34]; adopting higher recruitment standards (recruiting from the upper distribution of SABER 11 or SABER PRO); expanding the programs *Excelencia Docente y Académica Todos a Aprender* (PTA) and the scholarship program for Masters degrees and credit scholarships for teachers. The implementation of flagship programs such as the Jornada Única could be enhanced, and the targeting of the program providing food at schools (*Programa de Alimentación Escolar*, PAE) could be improved. Finally, an integrated information system of educational quality, covering all educational levels, should be put in place.

To contain costs in the health sector, it is necessary to shift resources to an effective control of chronic diseases through preventive medicine and primary care, and away from costly inpatient treatments. Stronger incentives to increase quality and reduce costs at provider level (IPS), and for territorial authorities with public health responsibilities should be put in place. Insurers (*Entidades Promotoras de Salud*) should be incentivized to become more effective and efficient purchasers of care by awarding contracts based on robust measures of quality and outcomes.[35] Good practices in risk-adjustment mechanisms and payment instruments that introduce risk-sharing between insurers and providers should be considered. Strengthening the country's capacity to evaluate cost-effectiveness and appropriateness of new technologies, as well as regulation of medicines and price-setting criteria would greatly contribute to the system's short and long-term sustainability. *Colombia could use the modelo integral de atención en salud* (MIAS) to move to a model based on primary health care principles, strengthening the role of primary care physicians, and expanding the roles and responsibilities of nurses and other medical professionals, removing legal obstacles for their increased roles in health care. Furthermore, health system information should be used to ensure improvements in quality and efficiency gains, by supporting monitoring and planning and by providing more detailed information on service quality and outcomes.[36]

Accelerate implementation of tax administration reforms (DIAN) to reduce tax evasion and reach the full domestic revenue mobilization impact of the 2016 tax reform

Stronger control of the special tax regime for not-for-profit entities (*Entidades sin ánimo de*

34 This entails merit-based recruitment and promotion process, induction, evaluation of in-service teachers linked to training programs.
35 OECD (2015b).
36 See Policy Note #6 on Health.

***lucro*, ESAL) is needed to close loopholes that allow non-eligible organizations to unduly enjoy its tax benefits.** Law 1819 of 2016 and Decree 2150[37] need to be fully implemented. The latter regulates who can benefit from the Special Tax Regime and the tax treatment of donations[38] made by ESALs.[39] The unified annually-updated web registry[40] of ESALs should facilitate control and supervision by DIAN and increase the transparency of the qualification, permanence and updating process. Some of this information would need to be made public. In addition, the introduction of balance sheet controls is needed to dis-incentivize indefinite accumulation of profits that contravenes ESALs' social objectives.

Tax administration reforms need to continue to reduce compliance costs and enable revenue mobilization. Good corporate governance and autonomy play a critical role. DIAN's spending on technology should converge to international standards, and the limitations of its information systems should be addressed.[41] Low spending on technology is reflected in low incidence of electronic payments and low levels of electronic government. It also limits the effectiveness of the fight against contraband, due to lack of traceability systems and scanners. In addition, increased autonomy in human resource management could increase the efficiency of DIAN, as more qualified personnel would allow them to make better use of information technologies to detect potential fraud and increase capacity to perform audits.

Adopt additional tax policy measures to increase revenues and efficiency

The current regulations related to *Zonas Francas* need to be reviewed. Special tax treatment to corporations can only be justified if the benefits in terms of job creation and investment outweigh the cost (including the foregone tax revenue and the economic distortions they introduce). As such, a rigorous cost-benefit analysis should be conducted for all existing *Zonas Francas*, as well as for new tax benefit schemes such as those for new investment in post-conflict regions. Single-company *Zonas Francas* should be phased out. Tax expenditures linked to *Zonas Francas* should also be explicitly quantified[42] and made public.

The personal income tax base should be broadened and the rate schedule adjusted accordingly. Over 80 percent of the active population has incomes that fall below the current threshold.[43] To increase the progressivity of the tax system, a change to the tax schedule could be considered. The maximum marginal tax rate of 33 percent could be increased to 35 percent, as suggested by the Tax Commission, and the number of income brackets could be

37 Decree 2150 regulates Articles 105, 140 and 163 of Law 1819 of 2016 and Article 22, 23, and 257 of the Tax Code.
38 Donations will be treated in a harmonized manner, with 20 percent of the donation resulting in a 20 percent tax discount. It limits the total tax discount for Art. 255,256,257 of the Tax Code to 25 percent of that year's ISR.
39 The reimbursement of ESALs' contributions and the distribution of surpluses, directly or indirectly, are prohibited even after dissolution or liquidation.
40 The web registry (and the annexes) should include information regarding the activity, the amount and destination of the net surplus or profit, the annual management report, the amount and destination of permanent resource earmarking (*asignaciones permanentes*), the name and ID of management, control, founders, donors, the value of the assets at the previous year-end, annual results report, financial statements.
41 The 2016 Tax reform (Law 1819) mandated DIAN to prepare a 5-year technological plan to improve tax administration and revenue collection efficiency.
42 The MFMP does not quantify tax expenditures resulting from the fiscal benefits extended to Zonas Francas (tax free zones). DIAN estimated that the fiscal cost from the reduced tax applied in Zonas Francas was COP200 million in 2012 and COP168 million in 2013. There are 31 permanent Free Zones (with 500 companies operating in them), and numerous special or single-company free zones. World Bank (2012).
43 Schatan (2015), World Bank (2012).

increased. The income bracket for the 0 percent marginal tax rate could be lowered, and an intermediary marginal tax rate between the 0 percent and the 19 percent could be introduced. Pension incomes should have the same tax treatment as other income, including the same tax benefit caps.

PIT-related tax expenditures should be reduced. The cap for all deductions, exemptions and tax benefits for labor income, which is currently at 40 percent of the annual income up to 5040 UVT (COP167.1 million), should be lowered to increase the effective PIT rate but also to improve progressivity of the tax system. Regressive exemptions, such as those on voluntary savings for retirement and real estate, and deductions on incomes for employees should be phased out. The cap for non-income labor deductions should be lowered.

Taxation of dividends should become more progressive. They are currently taxed at 5 percent for dividend incomes greater than 600 UVT[44] (COP19.9 million) and at 20 UVT plus 10 percent for dividend incomes greater than1,000 UVT (COP33.2 million). Furthermore, the loophole on dividends received but not distributed should be closed. The preferential tax regime for capital gains should be reviewed, and the tax should also be increased.

Enhance subnational own-resource mobilization

Updating cadasters and land registries and assuming same effective tax rates could double tax collections from this source.[45] Strong institutional coordination and political support are needed to fully implement the Multi-Purpose Cadaster as laid out in CONPES 2859 of 2016. A common information management platform could support local governments in administering property and other local taxes and central rules could ensure higher compliance with property taxes.

A comprehensive review of the subnational tax system is needed, to simplify and adequate the structure and tax design. There are numerous subnational taxes with very different bases and tax rates across departments and municipalities, which increase tax compliance costs for taxpayers and make local tax administration more complex. For specific consumption taxes, the dispersion of tax rates should be reduced, including with respect to VAT. The local business tax (ICA) should be standardized across activities, taking different rates of profitability into consideration. Over the medium term, Colombia should consider replacing the ICA with a more efficient and simpler tax. Additionally, to simplify the subnational tax system and reduce compliance and administrative costs, taxes that have low revenue generation potential (such as stamp taxes, slaughter, notices and boards, etc.) should be eliminated or replaced with a simple unique tax.[46]

44 One *Unidad de Valor Tributaria* (UVT) was set at COP33,156 for year 2018 with the Resolution 000063.
45 Sánchez and España (2012). For more detailed recommendations, see Policy Note #9 on Territorial Development.
46 For more detailed recommendations, see Policy Note #7 on Financing and Managing Subnational Governments.

Annex 1.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Increase public spending efficiency	• Conduct comprehensive reviews of quality, efficiency and effectiveness of public spending and identify potential savings • Account for all subsidies in the fiscal accounts • Make SECOP II use mandatory for all agencies, limit the use of non-competitive procurement methods and impose stricter limits on contract amendments • Prioritize the implementation of *Jornada Única* to the poorest, most vulnerable segments of the population; and improve targeting for the school feeding program *PAE* • Introduce stronger incentives to increase quality and reduce costs at health services provider level (IPS) and for the territorial authorities • Introduce reimbursement mechanisms that result in a more appropriate risk sharing by insurers and providers • Award contracts to EPS based on robust measures of quality and outcomes	• Unify recurrent and investment budgets • Adopt program budget and modern budgetary classification • Reduce/eliminate the dispersion of the procurement legal framework; and make use of demand aggregation mechanisms mandatory for high-demand goods, including at subnational level • Put in place an integrated system of information of educational quality • Shift to a health model based on primary health care principles • Strengthen the technical capacity to evaluate the appropriateness of new technologies (IETS, *Instituto de Evaluación de Tecnologías en Salud*); and the regulation of medicines and their price-setting criteria by the Medicine Commission (CNPMDM)
2. Reduce tax evasion	• Strengthen control of the special tax regime for not-for-profit entities (*ESAL*) • Improve DIAN's investment in information technology to address the serious limitations of its information systems • Increase DIAN's autonomy in human resource management	
3. Increase tax revenues	• Review regulations for *Zonas Francas* • Broaden the tax base of the personal income tax; reduce PIT-related tax expenditures; adjust the tax schedule • Increase progressivity of dividend taxation	
4. Enhance sub-national government own source revenue	• Update the cadasters • Put in place a common information management platform	• Conduct a comprehensive review of the subnational tax system to simplify and adequate the structure, tax design, procedural code, as well as the sanction framework • Replace ICA with a more efficient and simpler tax • Eliminate low revenue generating sub-national taxes, or replace them with a single tax

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NOTE 2

PRODUCTIVITY

There has been no productivity growth in Colombia since 1951, reducing potential economic growth and wellbeing. Overall productivity performance is a result of productivity dynamics at the firm level, influenced by both external and internal factors to the firms' operations.

Four challenges have been identified for such poor performance: (i) regulatory, tax and tariff distortions that create a restrictive business environment; (ii) underdeveloped and costly logistics that limit Colombia's integration with international markets; (iii) firms lacking production, technological and innovation capabilities needed to catch up with the production frontier; and (iv) business informality, which correlates with low productivity performances. The skills mismatch is another factor contributing to low productivity growth and is discussed in the Policy Note #3 on School to Work Transitions.

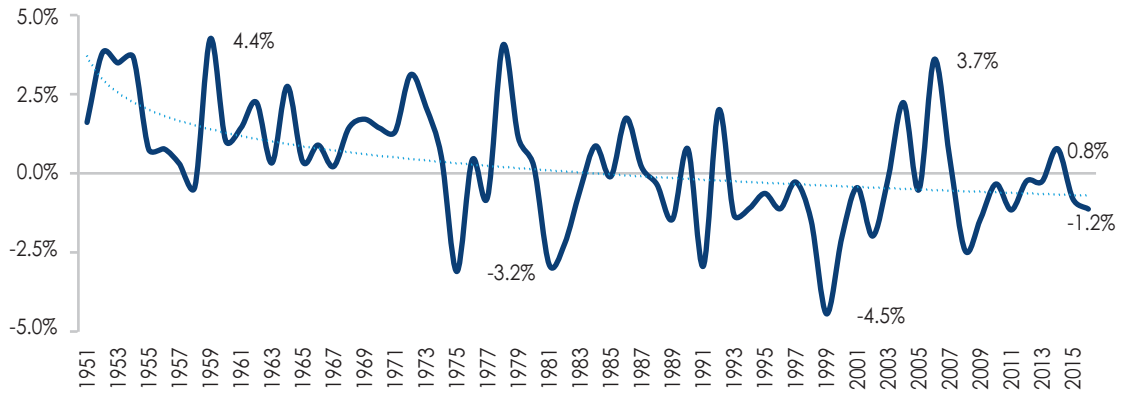
Public policy should focus on eliminating barriers to growth and external competition; it should also provide the right incentives for capital, skills and knowledge accumulation; correct government and market failures; promote private sector investment and participation; and support firms' capabilities with an appropriate policy mix that expands programs that are proven successful and eliminate duplications in support to firms' development.

Context And Reform Progress

Even though Colombia's economy has proven resilient to various external shocks over the years, the disappointing productivity growth has been a missed opportunity to reduce poverty and promote shared prosperity. In the period 1951-2016, economic growth averaged 4.1 percent[1], while productivity grew at an average of 0.2 percent (Figure 2.1).[2] This low productivity growth represents a missed opportunity for improving the well-being of Colombians as productivity growth is the ultimate long-term driver for improving a country´s living standards.[3] If Colombia had experienced the same productivity growth as China since 1954,

1 All productivity and GDP data and estimations are based on The Conference Board (2017) Total Economy DatabaseTM Growth Accounting and Total Factor Productivity, 1950-2016, November 2017 (Adjusted Version).
2 Productivity growth was lower than 0.5 percent in 38 out of the 66 years analyzed.
3 Krugman (1994).

Figure 2.1 Total Factor Productivity growth, 1951-2016



Source: The Conference Board (2017), Total Economy DatabaseTM Growth Accounting and Total Factor Productivity, 1950-2016, November 2017 (Adjusted Version).

its income per capita would be five times higher today. Similarly, if Colombia's productivity growth had been the same as Uruguay´s GDP per capita would have been double what currently is today.[4]

Total factor productivity (TFP) has contributed negatively to economic growth in almost every year over the last three decades. In the last decades growth in Colombia was mostly driven by capital and labor expansion, with smaller contributions by higher value-added inputs such as skilled labor and information and communication technology (ICT) capital. Instead total factor productivity has contributed negatively to growth in all but five years since 1987 (Figure 2.2).

Labor productivity growth has been positive since 2001, mainly due to within-sector productivity growth rather than to any structural transformation of the economy. Following Rodrik's decomposition[5], we find that labor productivity growth in Colombia is mainly due to productivity growth within sectors rather than to productivity growth resulting from reallocation of labor between sectors (i.e. structural transformation). Similarly, our results show that there is no evidence of conflicting growth-reducing structural change in Colombia during this period, compared to what Rodrik finds for Latin America and Africa between 1990 and 2005. In conclusion, structural transformation had a neutral effect on labor productivity growth during the last 25 years in Colombia.[6]

Main Challenges

Overall productivity growth is influenced by firm-level productivity growth[7], which responds

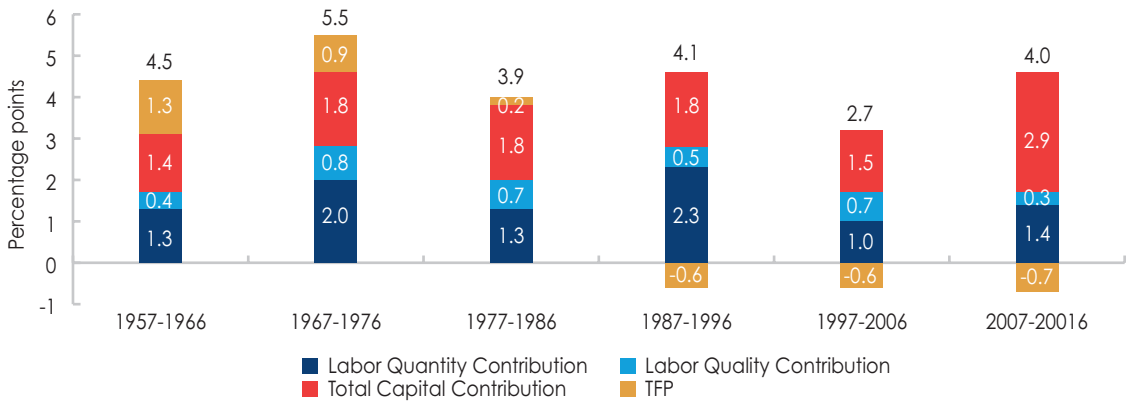
4 Productivity in the agriculture sector is not specifically discussed in this note, but it is also a crucial area contributing to overall low productivity in Colombia. First, agriculture is characterized by lower productivity than other sectors as it employs more than 15 percent of workers but contributes just 6 percent of GDP. Second, agricultural productivity growth has been lower than in other comparator countries (Mexico, Brazil, Argentina, Chile) during the last 20 years. USDA (2014); Castro (2017). For a detailed analysis of the causes of low productivity in agriculture, which include land distribution inequality and ineffective factor markets, refer to the recent World Bank report "Getting agriculture going in Colombia". World Bank (2018).

5 Rodrik (2011).

6 A complementary counterfactual exercise confirms this finding, in which labor productivity growth would be practically the same as the observed, if the labor shares across sectors are assumed to remain the constant as in 1990 for the entire period.

7 See for instance Brown et al. (2016).

Figure 2.2 Economic growth decomposition, 1957-2016



Source: The Conference Board (2017), Total Economy Database™ Growth Accounting and Total Factor Productivity, 1950-2016, November 2017 (Adjusted Version).

to factors that are external and internal to firms' operations. External factors affect the decisions and actions firms take regarding their performance in the market while internal factors are related to managerial practices, talent, research and development (R&D), and innovation, among others.[8] Colombia faces five main challenges for productivity growth: regulatory, tax and tariff distortions; costly logistics; weak firm capabilities; business informality and skills mismatch.[9]

Regulatory, tax and tariff distortions

The Colombian government has made important efforts to improve the business environment. Since 2008, Colombia has progressively eliminated procedures and the time required to open a business: procedures were cut from 11 to 8, and time was reduced from 40 days to 11 days in 2017[10], even if these improvements have not been implemented uniformly across the country.[11] In 2017, the Government of Colombia (GoC) implemented important milestones: it issued a decree[12] creating the one-stop shop *Ventanilla Única Empresarial* (VUE) for firm registration and other business activities, and launched a national strategy to eliminate, automate and simplify barriers, regulations or administrative procedures (known as "*menos trámites, más simples*").

Despite these improvements, businesses continue to face significant regulatory barriers and restrictions imposed by redundant and inefficient regulations. In 2014, Colombia established a policy roadmap for regulatory improvement[13], which recommends ex-ante regulatory impact analysis (RIA) and appropriate public consultations through a web platform *Sistema Único de Consulta Pública* (SUCOP) to minimize adverse impact of new regulations limiting markets functioning. However, RIA is not yet legally enforced and the reforms do not affect the stock of distortionary regulations and go-

8 Syverson (2011).
9 For the latter see also Policy Note #3 on Boosting Youth's Skills and Easing Transition from School to Work. Particular attention is given to the lack of responsiveness of the supply of skills to the demand from private companies.
10 World Bank (2017b).
11 World Bank (2017b). In some cities opening business entails 13 to 14 procedures, and takes 30 to 40 days.
12 Decreto 1875 (2017).
13 *Documento CONPES 3816 Mejora normativa: análisis de impacto*. Available for download at https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3816.pdf

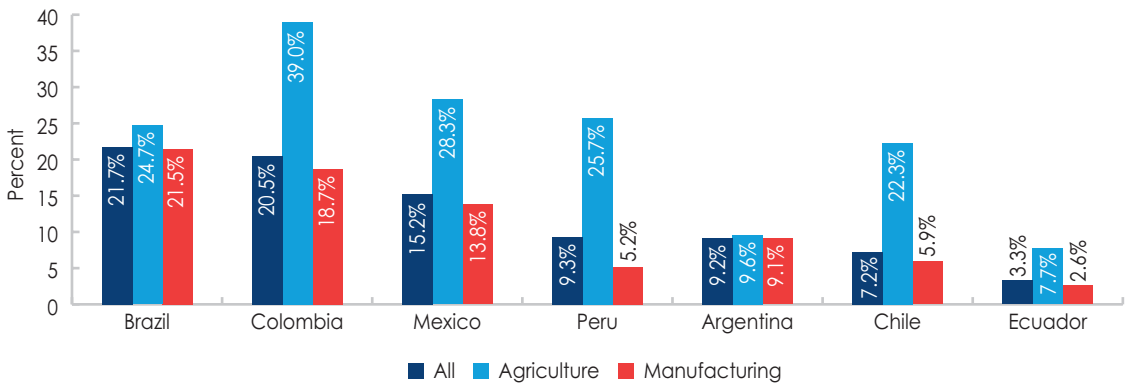
vernment interventions. According to the National Planning Department (DNP), between 2000 and 2016, the executive branch of the Colombian government issued 94,748 regulations[14] (9,222 in 2016 alone), many of which impose additional regulatory burdens on private businesses.[15] Furthermore, state involvement in business operations (price controls and command and control regulation) is higher than the average among Organisation for Economic Co-operation and Development (OECD) countries. The latest OECD Economic Survey of Colombia estimates that aligning market regulation to OECD standards could boost GDP by 0.25 to 0.5 percent annually within 5 years.[16] As suggested by the recent Doing Business (2018) report, key areas where Colombia lags include contract enforcement (177/190), paying taxes (142/190) and trading across borders (125/190).

Recent fiscal reforms have addressed some distortions, but have not eliminated the misallocation resulting from the existing tax system. In 2012, Colombia approved a tax reform[17] decreasing payroll taxes by 13.5 percentage. Furthermore, the 2016 tax reform[18] established a progressively lower corporate income tax rate, reducing it by 7 percentage points by 2019, although it will remain higher than OECD and LAC average tax rates. According to Doing Business 2018, Colombia's effective rate of corporate taxation is one of the highest in the region (69.7 percent), after Argentina (106 percent), well above the LAC and OECD averages (52.1 and 42.1 percent, respectively).[19] The 2016 tax reform also introduced the *monotributo* (single tax) a simplified tax for individuals owning small businesses in retail and beauty salons, with certain restrictions. However, the effective rate of the *monotributo* is greater than that of the ordinary income tax regime for individuals[20] and the benefits of the *monotributo* do not compensate the higher tax burden[21], which resulted in a very limited uptake. Furthermore, paying taxes is burdensome and time-consuming: it takes 15 payments and 239 hours a year, compared to 11 payments and 163 hours a year on average in the OECD.[22] The lack of coordination, at least in terms of thresholds and tax bases, between the national and subnational tax structures leads to double taxation and other inefficiencies. As an example, tax compliance cost of the ICA (local business tax) is estimated on average at 1 percent of total sales, higher than the tax rate itself.[23]

Although trade-related tariffs have gradually declined and are relatively low, tariffs dispersion has increased and there are important non-tariff barriers that undermine internatio-

14 According to DNP (2017), in a given day, the national executive entities would issue 2.8 decrees, 11.2 resolutions, 0.3 circular letters, and 15,4 other type of norms.
15 Out of these 9,222 norms issued in 2016, 1,070 were decrees, out of which only about 45 percent were considered substantial.
16 OECD (2017).
17 Law 1607 (2012).
18 Law 1819 (2016).
19 For the methodology to calculate the total tax and contribution rate as percentage of profits please refer to http://www.doingbusiness.org/Methodology/paying-taxes#DB_tax_total. In the case of Colombia, the calculation is as follows (statutory tax rate in parenthesis): municipal tax of 19.52 percent (1.10 percent) + corporate income tax of 16.33 percent (25 percent) + social security contributions of 14.12 percent (12 percent) + financial transaction tax of 6.51 percent (0.40 percent) + CREE of 5.88 percent (9 percent) + payroll tax of 4.51 percent (4 percent) + real estate tax of 1.48 percent (1 percent) + urban boundary tax of 0.79 percent (2.6 percent) + net wealth tax of 0.29 percent (0.15 percent-1.0 percent) + vehicle tax of 0.26 percent (2.5 percent) = 69.7 percent.
20 The effective rate of taxation is only lower than the income-tax rate for individuals with at least 30 percent profits in the highest income category.
21 CPC (2017).
22 Excluding subnational taxes, which make the tax burden even higher.
23 World Bank (2015).

Figure 2.3 Ad-valorem equivalent of Non-Tariff Measures, 2000-2004



Source: Kee at al. (2006).

nal integration efforts. The Colombian trade regime continues to be complex and burdensome due to high dispersion in tariffs and the presence of non-tariff measures (NTM), which have increased over time. As shown in Figure 2.3, from 2000 to 2004, the Ad-Valorem Equivalent of NTM for Colombia was estimated to be higher than in similar economies in the region, particularly for agricultural products.[24] In fact, NTMs in the agriculture and poultry sectors are considerably higher than in other sectors.

As a result, Colombia is not integrated into global value chains (GVCs) in a significant way, and its integration is mostly through forward linkages. In Colombia foreign inputs represent only 8.9 percent of exports (2014), making the country the second to last (after Saudi Arabia) in a sample of 59 countries analyzed by a recent study.[25] Similarly, the share of foreign value added in Colombian exports (16 percent) is half of that in countries such as Mexico, Thailand and Malaysia. Furthermore, excluding the mining sector, Colombia's participation in GVCs has decreased since 1995 and it is the lowest among comparator countries.[26]

Costly logistics

In recent years, the Colombian government started taking steps to develop the logistics sector to improve competitiveness. The government included the objective of providing infrastructure, logistics and transport services for regional integration and competitiveness in the National Development Plan 2014-2018.[27] During this period, progress was made on several fronts: implementation of legal reforms to promote public-private partnerships for infrastructure investment; launch of the process to restore the navigability of the Magdalena River; and launch of the Master Plan of Intermodal Transport. Also, Colombia adopted the World Trade Facilitation Agreement[28], and issued a new Customs Statute[29], which introduced the regulatory framework for important improve-

24 Kee at al. (2006).
25 OECD (2018).
26 Arenas and Taglioni (2015).
27 The National Logistics System and the National Logistics Strategy were included in the National Developing Plan (2010-2014).
28 Ratified by Congress on January (2018).
29 Decree 390 (2016).

ments such as the possibility of advanced declarations; adoption of *Dirección de Impuestos y Aduanas Nacionales* (DIAN) risk management system; electronic payment; abbreviated customs clearance; and use of non-intrusive inspection equipment. However, many of these reforms still lack full implementation.

Despite these recent efforts, logistics are poor and the logistics service sector is underdeveloped, hindering economic integration and productivity growth. According to the World Bank's Logistics Performance Index, in 2016 Colombia ranked 58 out of 160 countries, representing a considerable improvement with respect to 2016 when it ranked 94 out of 160. Such performance is due to improvements in the efficiency of the clearance process by border control agencies, including customs, in the ease of arranging competitively priced shipments and in the ability to rack and change consignments. Nonetheless, according to the 2015 National Logistics Survey[30] (ENL, in Spanish), logistics costs in Colombia are estimated at 14.97 percent of total sales, higher for smaller firms. In terms of quality, only 77.3 percent of deliveries arrive on time, while just 57.8 percent are considered perfect orders.[31] The use of logistics operators is low (37.5 percent[32]) and concentrated among large firms. Many firms operate their own services mainly due to the low supply of specialized tailor-made logistics services, particularly for small firms; lack of innovation; and low ICT use. In this under-developed market prices are high.[33] Finally, there is a lack of human capital with skills suited for the logistics sector, and the supply of formal logistics training is scarce.[34]

Behind-the-border barriers restrict competitiveness of the Colombian logistics sector, limiting the country's international integration. Of the firms surveyed in the ENL (2015), 11.8 percent believe that the foreign-trade logistics sector is not competitive, mainly as a result of inefficient customs management. Respondents point to complex custom procedures and a lack of knowledge about current regulations. In Colombia, cargo inspections take 5 days on average, compared to about 2 days in Mexico, Chile and Peru; import procedures take 130 hours due to customs declarations, which take between 83 and 109 hours.

Weak firm capabilities

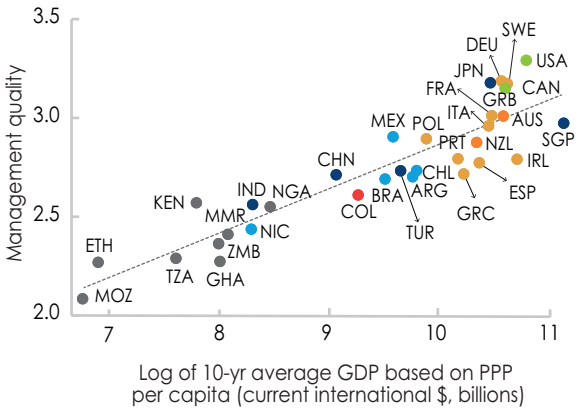
Good managerial and organizational practices, crucial for innovation and firm productivity, are especially low in Colombia, and managers systematically overestimate the quality of their managerial and organizational structure.[35] Recent empirical evidence suggests that about 25 percent of cross-country productivity gaps are a result of management practices[36], and management quality is significantly higher in more advanced and productive countries (Figure 2.4). Yet, management practices in Colombia are poorer than in most countries in the sample[37], including comparable countries in the region such as Argentina, Brazil and Chile.[38]

30 DNP (2015).
31 Idem.
32 Idem.
33 Idem.
34 Only 61 percent of universities offering logistics training are accredited and just 3 percent of academic programs in logistics are accredited.
35 See Cirera & Maloney (2017) for an overview of the literature on firm capabilities for innovation.
36 Bloom et al. (2014)
37 Argentina, Australia, Brazil, Canada, Chile, China, Colombia, France, Germany, Great Britain, Greece, India, Italy, Japan, Mexico, New Zealand, Northern Ireland, Poland, Portugal, Republic of Ireland, Singapore, Sweden and USA.
38 This is true across all areas: monitoring, targets, people management and, particularly, operation.

Particularly worrying is how managers systematically overestimate the quality of their managerial and organizational structure: Colombian firms within the sample have the largest over-estimation gap. This is explained by a variety of reasons, including lack of knowledge of high-standard managerial practices; the prevalence of family-owned firms; asymmetric information in the market for consulting services; and weak contract enforcement which leads to a preference among family-owned SMEs for relying on family managers, rather than professional external administrators.

Colombian firms that lack strong management and organizational capabilities are limited in their path towards the technological frontier. Managerial and organizational capabilities are crucial to accumulate other technological capabilities and innovate, and critical for catching-up and converging to the technological frontier.[39] Firms with no basic accounting and tracking routines[40] are in fact less likely to push for research or innovation. Organizational practices, such as the introduction of quality managerial processes, creation of design and engineering departments, and performance-based rewards systems, are also positively related to rapid learning processes and the implementation of innovative practices.[41] Only 7 percent of manufacturing firms have an R&D department in charge of Science, Technology and Innovation (STI) activities.[42]

Figure 2.4 Management quality and economic growth



Source: Cirera and Maloney, 2017.

Colombia has set up a 2025 road map to promote sustained productivity growth, but implementation challenges need to be addressed to make it successful. A recently approved CONPES document for productive development[43] is an important milestone to promote firm-level productivity growth. It includes the National Productivity Escalation Program based on the technological extension pilot led by DNP and *Servicio Nacional de Aprendizaje* (SENA), with the support of the World Bank; tailored training and technical assistance programs to strengthen business innovation; and initiatives to promote innovation finance and exports. However, the main challenge is to implement this policy in a context of increasing budget restrictions and fragmented resources, weak targeting and challenges to effective interinstitutional coordination.

39 Cirera & Maloney (2017). See Figure 2.7 for an explanatory diagram of the accumulation of capabilities across several dimensions as firms gain in sophistication.
40 Iacovone et al. (2017).
41 Cirera and Maloney (2017) cite Bell and Figueiredo (2012) for a review of research over 25 years on learning processes as a source of innovation capability building in firms from developing economies; and Garicano and Rossi-Hansberg (2015) for the role on knowledge-based hierarchies. On performance-based reward systems they cite De Jong and Den Hartog (2007); Ederer and Manso (2013); Gibbs et al. (2015); Leiblein and Madsen (2008); Chen, Chen, and Podolski (2014) and Mao and Weathers (2015).
42 EDIT (2015-2016).
43 Documento CONPES 3866 *Política Nacional de Desarrollo Productivo*. Available for download at https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3866.pdf

The most pressing challenge for Colombia remains to create the incentives for firms to reach the global productivity frontier. The Colombian productivity frontier is further away from the global frontier than that of comparable countries.[44] Furthermore, while the number of firms increased by four between 2000 and 2011, few Colombian plants are at the global productivity frontier. Brown et al. estimate that only 20 plants exceeded the global productivity frontier in 2011, corresponding to about 23 percent of total manufacturing plants that year.[45] These "global" plants are concentrated in few sectors.

Business informality

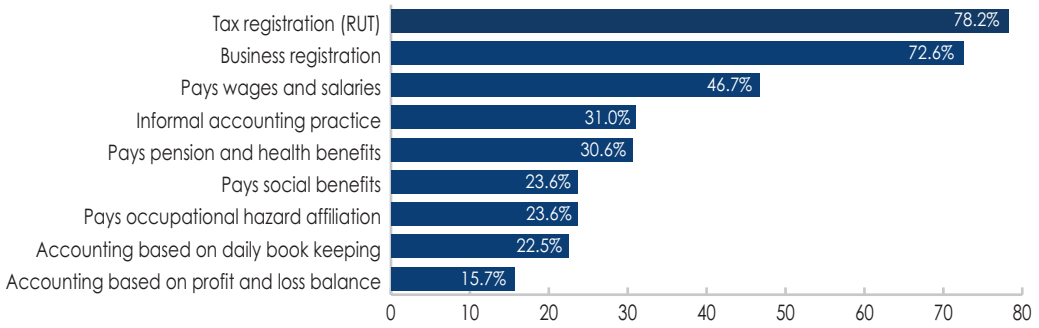
High business informality hampers economic growth. Defining informality, particularly business informality, is not straightforward since for a firm to be considered formal it must comply with several requisites, ranging from business registration, to social security payments, and accounting practices.[46] However, firms do not comply with all requisites at the same time (Figure 2.5). Such levels of business informality impose important costs on the economy. Under-registration of firms in the tax system is reflected in elevated levels of tax evasion: about 4 percent of GDP for the value-added tax (VAT) and income tax combined[47]; according to CPC, the cost of not paying social security amounts to about US$ 7 billion per year.[48] Estimations find that small formal firms in Colombia are about four times more productive than small informal firms and median formal firms are twice as productive as their informal counterparts.[49]

The entry costs faced by Colombian firms, in addition to the regulatory and tax burden, makes formalization unattractive. Another important barrier to formality is costly business registration, and structural design problems.[50] Salazar[51] shows that business registration fees in Colombia[52] are significantly higher than those of other countries in the region[53] and European countries like the UK.[54] Furthermore, fees for registration renewal are higher than in Argentina, the only other country in the region where such cost exists. In Colombia, renewal fees are charged annually and based on the same registration fee structure.[55] Likewise, Salazar et al. argue that Colombia and Brazil are the only two countries in the region where firms need to pay registration fees for new branches[56], and in this case, too, Colombian firms pay higher fees than Brazilian firms.[57]

High labor costs also disincentive formalization. The minimum wage is 86 percent of the median wage, considerably higher than in Mexico and Spain (37 percent), Germany and Greece (about 47 percent), or Chile (76 percent).[58]

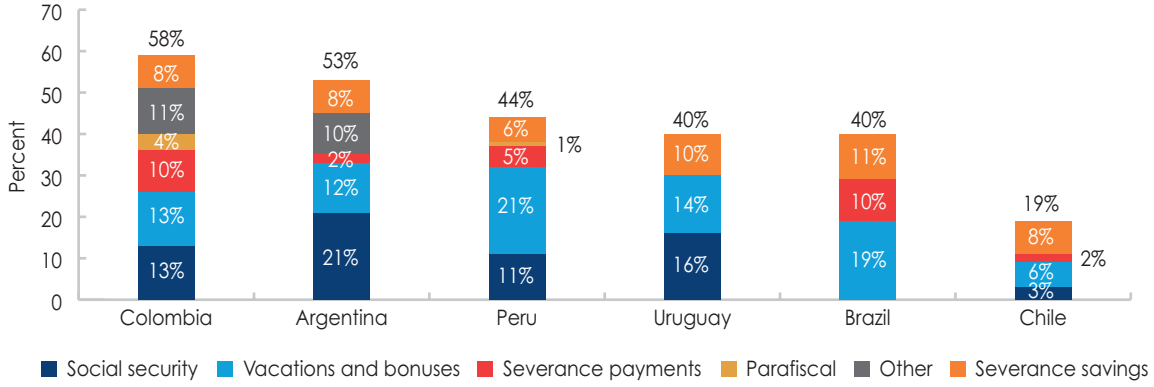
44 Brown et ál. (2016).
45 Idem.
46 According to DANE, labor informality in 2017 was 48.8 percent in the 23 largest cities and metropolitan areas, when measured in relation to the size of the establishment (at most five workers); and 49.2 percent when measured in relation to the pension contributions.
47 IMF (2017).
48 CPC (2017a).
49 Hamann and Mejia (2011).
50 The regulatory and tax distortions are also disincentives to business formalization.
51 Salazar et al. (2017).
52 For firms with social capital higher than US$ 1,000.
53 In Argentina the registration fee is US$ 5.88, in Brazil is US$ 18.34 and in Mexico is US$ 5.8.
54 DNP (2017). In the United Kingdom the registration fee is US$ 15.8.
55 In the renewal fee is increasing in the firm's share capital and it is lower than the one faced by Colombian firms with assets above US$ 1,000.
56 Salazar óp. cit. (2017).
57 Above US$ 200 in assets.
58 DNP (2017).

Figure 2.5 Business formality: compliance with requirements (share of firms)



Source: DNP (2018) based on DANE's Micro-Establishments Survey (2012-2016).

Figure 2.6 Non-wage labor costs



Source: DNP (2017).

Such distortions create rigidities in the labor market. Mora and Muro[59] show that Colombia's minimum wage is responsible for increasing informality and its persistence. Non-wage labor costs decreased substantially with the 2012 tax reform, and existing evidence suggests that the reforms had a positive impact on formal employment, with larger effects especially among smaller companies.[60] However, non-wage labor costs continue to be among the highest in the region (Figure 2.6).

Benefits from formalization may not be attainable for low-capability firms. Formalization per se has no automatic effect on access to credit or to other potential benefits of being formal.[61] Furthermore, programs for companies with weak business development that focus on providing information on the registration process and on the potential benefits of formalization, or those that focus on reducing formalization costs or simplifying entry processes to formality, on their own only have a modest impact.[62]

59 Mora and Muro (2017).
60 Kugler et al. (2017).
61 De Mel et al. (2013); McKenzie & Sakho (2010); Alcazar et al. (2011).
62 De Giorgi & Rahman (2013); Alcazar & Jaramillo (2012); Bruhn (2011); Bruhn & McKenzie (2013); De Mel et al. (2013); Kaplan, Piedra, & Seira (2011); Galiani et al. (2017).

Policy Options

Improving regulatory, tax and tariff framework[63]

Regulatory quality improvement

Create a special agency for regulatory quality improvement to be scaled up progressively; start from implementing a system following the RIA-Light approach. RIA implementation could be challenging, especially for emerging countries like Colombia. It could start with a "lighter" system that incorporates the most basic and necessary elements of a RIA system, seeking to gradually establish better practices according to the local context and capacities.[64] Ladegaard et al., in a study of sixty regulatory quality reforms in developing countries, identify two key predictors of success: the formal integration of RIA procedures in the policy-making process, and the establishment of an oversight body. Thus, the medium-to-long term goal is to create an independent oversight body in charge of revising the national regulatory framework; diagnosing the applicability of norms; and putting forward legal and administrative proposals, and sectoral regulations. The agency should analyze new rulings before they are enacted by the Executive branch, and oversee their public consultation process, under the technological platform SUCOP. These and other functions should be compatible with those set by CONPES Document 3816. Examples of such agencies include *Comisión Federal de Mejora Regulatoria* (COFEMER)[65] in Mexico, or the Better Regulation Executive (BRE) in the UK.[66] OECD's Council on Regulatory Policy and Governance recommends that the oversight body be established close to the center of government, and that it remain independent from political influence when performing technical functions of assessing and advising the quality of regulations.[67] The need for a new agency is driven by the importance of not diluting the focus on improving regulatory quality among other responsibilities of existing institutions (e.g. DNP), as this would hardly be a priority in such a situation. Importantly, the agency should be small and of high quality, with concrete targets to assess its effectiveness.

RIA should be mandatory for new norms with an expected impact above a specific threshold, or according to the results from applying a triage system. Although such an analysis is required by Document CONPES 3816, it has not been formalized by an Executive Decree. Given time and budgetary restrictions, RIA should follow the proportionality principle, that is, the extent of the analysis would depend on the magnitude of the expected impact. Thus, RIA could be applied only to those regulations that exceed certain expected compliance costs, for which criteria should be established in terms of economic, social and environmental dimensions. One option is to establish a threshold for expected monetary costs in addition to other criteria (such as scope). In the United States, the threshold is set at US$ 100 million per year, and there are also assessments of whether it imposes considerable costs to a certain sector or region, or whether it has adverse effects on competition, employment, investment, productivity or innovation.[68] In South Korea, RIA applies if the expected costs exceed the threshold of US$ 10.5 million per year, or if

63 For recommendations on tax policy see also Policy Note #1 on Fiscal Policy.
64 Ladegaard et al. (2018).
65 *Comisión Federal de Mejora Regulatoria*, https://www.gob.mx/cofemer/
66 https://www.gov.uk/government/groups/better-regulation-executive
67 OECD (2012).
68 OECD (2014b).

the regulation affects more than one million people, among other criteria.[69] Alternatively, a triage system could be implemented in which proposed regulations are classified based on a triage questionnaire and the level of RIA is applied accordingly. In Canada, regulations with an expected cost of CAD 10 million present value over a 10-year period, or less than CAD 1 million annually, are considered of low impact; those with expected costs between these thresholds and CAD 100 million present value or CAD 10 million per year are considered or medium impact; and those with higher expected costs are considered of high impact.[70] The RIA should specifically address the regulatory burden for SMEs, and consider a strategy for their compliance.[71] As for existing norms, the regulatory improvement agency should progressively review the current inventory, eliminating redundant, obsolete or costly norms. The agency should set cost-benefit standards such as the UK's *one in, one out*, or United States' *one in, two out*, for all new norms. Crucially, these policy practices should be extended to subnational governments.

The government of Colombia should maintain its strategy to simplify administrative procedures. In collaboration with other government entities at the national and subnational level, the Ministry of Commerce, Industry and Tourism should continue leading this process with its flagship strategy *Menos trámites, más simples*. The government should also continue to improve the country's business environment, including the revision of the payment structure for the business registry which needs to be made progressive, provide the right incentives and be aligned to the practice in other countries. Finally, it should scale up the implementation of the one-stop-shop (VUE) launched initially only in Bogota.

International trade reforms

A structural reform of the trade regime should be carried out and unnecessary non-tariff barriers should be reduced, aiming at deeper trade integration. Colombia should reduce tariffs on agricultural products, decrease tariff dispersion and improve efficiency of the tariff system. A less distortionary trade regime structure should be put in place, reducing tariff dispersion for similar goods, in particular for industrial goods, to reduce incentives for contraband and tariff evasion.[72] The government should also reduce non-tariff measures to make customs processes more agile and efficient. The prioritization of non-tariff barriers to be removed should be based on a cost-benefit analysis. Efforts should be made to strengthen integration into GVCs, by attracting foreign investors and supporting local firms in connecting to international partners; and improving domestic value chains. Regulatory and investment actions should also be taken to create a world-class business environment for international trade integration.[73]

Developing of an efficient logistics sector

Reduce the regulatory burden for trading across borders, especially with respect to customs processes. The adoption of implementing regulations for the new Customs Statute

69 OECD (2014a).
70 OECD (2015). In Canada, the Triage Statement can be omitted and an expedited RIA process applied when regulations have immediate or serious risk to health and safety, security, the environment or the economy.
71 This chapter should also be included in RIA of technical regulations, for which a modification of Decree 1595/2015 is needed.
72 Javorcik and Narciso (2008). There is a large evidence in the literature that higher tariffs dispersion is associated to higher contraband and tariffs evasion especially for industrial and non-homogenous goods.
73 Taglioni & Winkler (2016); Arenas and Taglioni (2015); Pathikonda and Farole (2016).

is critical. Immediate approval of the National Logistics Policy by CONPES will drive the implementation of the Statute, defining specific responsibilities, a clear time schedule for implementation, and a committed budget by participating institutions. The policy document includes a much-needed strategy that includes all the required changes in regulation and infrastructure needed to create an efficient intermodal transport system.

Current customs declarations processes need to be optimized to shorten export times. DNP estimates that adding flexibility to some of the punitive aspects tied to the anticipated declaration, and extending their use to the universe of traded goods would reduce the time needed for this procedure by 93 percent (compared to the 110 hours it currently takes). Other such tools are already included in the Customs Statute and their implementation would generate substantial benefits in the areas of customs risk management, systematization and interoperability (i.e. granting Authorized Economic Operators status to foreign companies, under DIAN's oversight), and increasing the use of technology and information systems. The single window for trade (*Ventanilla Única de Comercio Exterior*, VUCE) must become a true one-stop shop for foreign trade, incorporating all foreign trade operations, including instant inspections and advance declarations, and should be fully integrated with main trading partners. Finally, strengthening the newly created National Logistics Observatory[74] to provide permanent monitoring and the unification and upgrading of all information systems, including VUCE, is also recommended.

Train human capital for logistics. The government needs to define profiles for the logistics chain in the catalog of National Qualifications Framework (*Marco Nacional de Cualificaciones,* MNC). The MNC pilot in the port logistics subsector is a good start, followed by the road freight logistics. Implementation of the MNC for the whole logistics sector will allow the development of certified new technical and academic programs and the formalization of logistics-specific skills acquired at work. It will also help reduce the shortage of labor with the required competencies for the logistics sector.

Create incentives to develop specialized logistics infrastructure and services. Instruments that promote the construction and operation of specialized logistics infrastructure include standardized projects under the standardized projects policy (*política de proyectos tipo*) and the model of National and Binational Border Centers (CENAF and CEBAF). Programs promoting logistics innovation, entrepreneurship and ICT usage among of logistic providers and users should also be implemented.

Strengthening capabilities at the firm level

Tailor-made programs that meet the needs of individual firms are required to address poor management practices among exporting and importing firms. Improved management correlates with R&D and increases the impact of R&D on innovation. The *policy mix*, which depends on the stage of the National Innovation System (NIS) (Figure 2.7), should integrate elements such as: scaling-up the existing technological extension pilot; providing technical assistance to promote exports; competitivity-inducing practices; matching grants; technology centers and transfer offices; and business development services for SMEs. Interventions should be results-based. Colombia formulated the Productive Development Policy (PDP), fo-

74 https://onl.dnp.gov.co/es/Paginas/Inicio.aspx

cused on the development of the firm, which includes many of these recommendations. The government should keep this as its roadmap to increase productivity and foster innovation in the medium term.[75]

Guarantee public and private financing of the Productive Development Policy.[76] Competent government agencies to implement the PDP should fully take ownership. Making this policy the roadmap to Colombia's productivity growth implies prioritizing the financing of initiatives at all levels of government with a direct mandate from the President's office. Private sector funding, included as a key aspect of the PDP, is also essential and needs to be crowded in. Brazilian-style sectoral funds or models such as *Fundación Chile*, and the active involvement of the capital and risks markets are needed to strengthen innovation and even technological adoption in specific areas.

Implement fully the recommendations of the STI Public Expenditure Review (PER) to improve the design and functioning of STI instruments.[77] If the STI budget is concentrated in few instruments (12 programs have 75 percent of the budget), the Mixed Technical Committee for Innovation (*Comité Técnico Mixto*, CTM), under DNP leadership, should prioritize the functional review to improve these instruments based on adequate monitoring and evaluations systems. It is key to promote specialization across and within entities according to their mandate and to the type of beneficiaries they primarily serve based on their innovation stage, and eliminate overlap and competition among agencies. It is also important to implement an in-depth analysis to rationalize or consolidate instruments, and to eliminate duplication in terms of objectives and beneficiaries. A methodology also needs to be defined to carry out pilot programs that are completely new, that respond

Figure 2.7 The Capabilities Escalator

Source: Cirera & Maloney (2017).

75 Efforts should be made to implement the Management and Organizational Practices Survey (MOPS) and the innovation survey (EDIT) to gather systematic information that serves as basis for the formulation of firm-level tailor-made programs.
76 Also, it is urgent the issuing of secondary norms to regulate the recent Constitutional reform of the General Royalty System, to improve the allocation and execution of the STI Fund.
77 The STI PER was carried out in 2015 by DNP and the World Bank.

to a market failure not yet served by any existing instrument, include rigorous impact evaluations and are scaled up only after a careful cost-benefit analysis.

Reducing the costs and increasing the benefits of business formalization

It is critical to lower the cost of entry and labor costs, to reduce regulatory burdens through a business simplification strategy and to simplify the tax system.[78] Substantially reducing labor costs would require labor market and, eventually, pension system reforms, as well as further reduction of non-wage labor costs. For instance, the parafiscal cost covering affiliation to family compensation benefits (*Cajas de Compensación Familiar*, CCF) should be eliminated from the payroll and financed using less distortive sources, under common agreement between employers and employees of voluntary affiliations to such CCF benefits. The remaining parafiscal costs related to health, SENA and *Instituto Colombiano de Bienestar Familiar* (ICBF) should also be gradually eliminated from the payroll and replaced by alternative, less distortive financing sources, in line with the recommendation of the Commission of Experts for Equity and Tax Competitiveness.[79] Similarly, the costs for business registration and renewal fees should be revised in line with OECD country standards. Finally, the adoption of the one-stop-shop (VUE) outside Bogota, starting with the larger cities, is crucial to make business procedures seamless, including registration for new firms.

Increasing the benefits of business formalization is critical. The cost paid by firms to formalize should be offset by effective benefits. Using registration fees, chambers of commerce should provide services free of charge to registered firms to incentivize registration, including free access to the registration database. Furthermore, chambers of commerce, in coordination with the Ministry of Commerce, DNP and other key actors, should define a set of differentiated products available to registered firms to increase the benefit from registration, for instance, accounting and mediation services.

Formalization policy should incorporate business development initiatives as well as a revised control strategy. This would include providing a set of basic business development initiatives that would help firms reap the rewards from formalization. In view of recent empirical evidence[80], it is important that these initiatives target firms with the highest growth potential and revealed commitment to move up the capabilities escalator. These interventions should be results-based. Finally, the formalization and control strategy should prioritize its focus on larger informal firms instead of small subsistence firms.[81]

78 For recommendations on tax simplification see also Policy Note #1 on Fiscal Policy.
79 The Expert's Commission proposed to budget this cost based on the average cost of the last wo or three years, indexed by inflation and an additional factor whenever the economy grows more than 4 percent.
80 For instance, Benhassine et al. (2018), through a randomized experiment in Benin, show that interventions are only effective when including supplementary efforts, such as facilitating access to training services, to commercial banks, and to tax mediation services. The authors do not find, though, significant impacts on firms' performance. Also, the additional tax revenue from formalization does not seem to cover the cost of the program, for which better targeting towards firms more likely to formalize on their own and simpler registration process are recommended.
81 Bruhn and McKenzie (2013).

Annex 2.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Improve regulatory, tax and tariff framework	• Maintain efforts to simplify administrative procedures • Revise regulations hindering development and market creation, competition, and integration with GVCs	• Make regulatory impact assessment mandatory for new regulations with an expected impact (threshold or triage system) • Reduce unnecessary non-tariff measures based on cost-benefit analysis • Reduce tariffs on agricultural products • Decrease dispersion and improve efficiency of the tariff system
2. Develop an efficient logistics sector	• Adopt implementing regulations for the new Customs Statute; define responsibilities and time schedule; and commit required budget of participating institutions • Approve CONPES document on logistics and guarantee financing for its effective implementation	• Make VUCE a true one-stop shop for foreign trade: incorporate all foreign trade operations, including instant inspections and advance declarations, and all operators in the country; and fully integrate with main trade partners • Design instruments promoting innovation in logistics, entrepreneurship and ICT use among logistics services providers and users
3. Strengthen capabilities at the firm level	• Prioritize financing of PDP at all levels of government, with a direct mandate by the President's office to make it the roadmap for improving productivity • Promote private sector financing of PDP	• Implement Science Technology Innovation PER recommendations: reduce concentration of the STI budget; promote specialization within and across entities; rationalize or consolidate instruments; eliminate duplication in objectives and beneficiaries—all based on proper monitoring and evaluations systems • Scale up the technology extension pilot • Design and implement tailor-made programs that are result-based and meet the need of individual firms to address poor management practices
4. Reduce costs and increase benefits of business formalization	• Implement VUE in Bogota • Identify opportunities for lowering entry, labor, and regulatory costs • Create additional benefits to registered firms: access to database, accounting and mediation assistance • Revise the inspection and control strategy • Approve CONPES document on business formalization and guarantee its financing	• Implement VUE at the national level • Lower entry costs, labor costs and regulatory costs • Design and implement business development programs that allow access to formality benefits, targeted to firms with growing potential and reveled commitment for moving up the capabilities escalator

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Página Web

NOTE 3

EASING TRANSITION FROM SCHOOL TO WORK

Colombian youth have better prospects than ever before, but too many still face difficulties in the labor market. Too many young people drop out from school before completing upper secondary education, resulting in very high unemployment, informal employment or inactivity. Most of those who drop out come from disadvantaged backgrounds and rural areas. Even those who continue their studies show low levels of learning, despite recent improvements. In the 2015 PISA test, 43 percent of 15-year-olds in Colombia performed at levels demonstrating functional illiteracy. The results of the national test SABER 11 reflect these deficits in the performance of students in tertiary education. Very few institutions and programs have high-quality accreditation, and those programs are accessed mostly by better-off students. As a result, most youth bring inadequate skills with them to the labor market, regardless of their level of education: employers mention the lack of skills of graduates as one of the key constraints to fill vacancies. Once in the labor market, many youth do not find support for compensating their lack of skills that employers look for and overcome other barriers.

Improving outcomes requires a combined strategy to upgrade skills and to provide active support for the transition to the labor market. A skill upgrading strategy needs to start with providing good quality early childhood development programs and a focus on learning during basic and upper secondary education. The transition between levels of education also needs to be facilitated to reduce repetition and drop-out rates. A reform of the quality assurance and financing systems for tertiary education is needed to improve access and ensure quality of tertiary education. To support transition to the labor market it is necessary to: align technical education and training with the needs of the private sector in the management of the skills development system; offer pathways to return to the formal education system for drop-outs; and expand effective active labor market policies.

Context and Reform Progress

Colombian youth have better prospects than ever before but too many of them face a difficult transition to the labor market. Between 2005 and 2015, the average number of years of education increased from 6.8 to 8, and the gross enrollment rate in tertiary education doubled to 49.4 percent. More youth participate in the labor market and work in formal jobs than a decade ago. Still, 25 percent of youths ages 15–29 are working in precarious, informal jobs.[1] Another 20 percent of youth are *ninis*[2] (out of school and out of work, i.e., NEET). These ninis are mostly women (70 percent), from the poorest 40 percent of households (60 percent), and living in rural areas (88 percent). Jobless youth, especially men, are more likely to fall into crime and illegal activities, even more so in Colombia with areas of high criminality rates.[3]

Ensuring education and skills for all young people is essential to increase the country's productivity, improve equity and reduce poverty and violence. More education and improved skills of the working population increase productivity, and lead to higher long-term economic growth.[4] They also benefit individuals through better jobs and higher incomes, especially in Colombia, where economic returns to education are among the highest in the region.[5] Non-economic outcomes for youth and their families also improve, and include better health, more support for democracy, and less violence, and a better context for their children to grow and prosper.[6] Providing youth with the skills can be one of the most effective policies for breaking the intergenerational transmission of poverty.[7]

Main Challenges

Too many young people leave school before completing upper secondary education

Drop-out rates in basic and upper secondary education are high, especially between levels. Access to education has improved significantly over the past decade, especially in early childhood education and tertiary education, but the drop-out rate starting with the transition to lower secondary remains high: 17 percent of students who complete 5th grade (primary) drop out in the transition to 6th grade (lower secondary).[8] Of those who continue to 6th grade, 37 percent do not graduate from upper secondary education after four years. For those who complete upper secondary education, only 38 percent immediately transition to tertiary education, and 28.3 percent of those who enroll drop out before completing their first year at college. This is even higher in technical and technological programs, where 35.1 percent of students drop out.[9]

Youth report that the main reasons why they drop out are their lack of interest and a per-

1 Estimates are based on the 2016 National Household Survey of Colombia (*Gran Encuesta de Hogares, in Spanish*).
2 "Nini" is the contraction of the Spanish phrase "ni estudia ni trabaja," which refers to youth who are not in employment,education nor training.
3 De Hoyos, Rogers, and Székely (2016), Chioda (2017).
4 World Bank (2018). Hanushek and Woessmann estimate that raising learning outcomes for all 15-year-old students to minimum levels in Colombia would raise long-term GDP growth by 0.7 percentage points per year (OECD 2015b).
5 Acosta, Muller and Sarzosa (2015), Ferreyra et al. (2017). The economic returns of completing higher education is 179 percent in Colombia, compared to the Latin American average of 104 percent (Ferreyra et al. 2017).
6 OECD (2015a); World Bank (2018).
7 García et al. (2015); Heckman and Mosso (2014); Rubio-Codina, Attanasio, and Grantham-McGregor (2016); Gronqvist, Ockert, and Vlachos (2017).
8 Sanchez et al. (2016).
9 Ferreyra et al. (2017)

ceived lack of relevance of education, with significant differences by gender. A third of drop-outs cite a lack of interest or a feeling of having completed education. Inadequate supply of school infrastructure is an uncommon reason for dropping out. The share of students reporting a lack of school or space in a nearby school as the main reason for dropping out is low at 6.7 percent in rural areas, and 5 percent in urban areas. Differences by gender are substantial. For 11 percent of females who dropped out, a pregnancy was the main reason. For an additional 18 percent, the main reason was taking care of the family. The two most commonly cited reasons for males to drop out are lack of interest (36 percent) and a reported need to work (17 percent).

Low levels of learning and high repetition also drive high drop-out rates. More than 40 percent of 15-year-olds in Colombia have repeated at least one grade, the highest rate among countries participating in the Programme for International Student Assessment (PISA).[10] This repetition happens mostly in the first years of primary, secondary and upper secondary education, and repetition is one of the key predictors of dropping out. Students with low learning outcomes cannot follow the curriculum and are forced to stay behind, eventually dropping out of school.

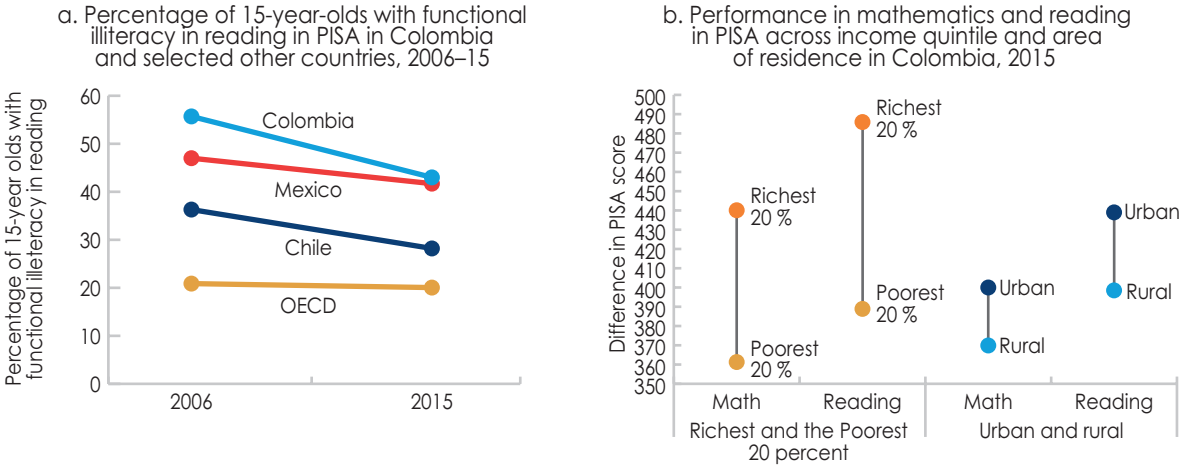
The education system does not provide the right skills for graduates, starting with low learning in basic education

Youth need cognitive, socioemotional and technical skills to succeed in the labor market and in life. Cognitive skills provide the ability to think, analyze and solve problems. Socioemotional skills are behaviors and attitudes for managing personal and social situations, and are as important for success.[11] Socioemotional skills also drive a range of social outcomes: better health and well-being (including fewer teenage pregnancies) and less violence.[12] While cognitive skills are the traditional focus of the education system, cognitive and socioemotional skills reinforce each other.[13] Together they lay the foundations for developing technical skills, and success depends on having all three types of skills. The development of these skills is not formed only during adolescence but is a cumulative process that starts at birth. It depends to a high degree on family background, early childhood experiences, and the quality and type of education.[14]

The quality of education has improved, but overall levels of cognitive skills remain low and disguise many inequalities. Colombia achieved one of the largest improvements of any country in the 2015 PISA, which focuses on the cognitive skills of 15-year-old students in math, reading and science.[15] The improvement was most significant among low performing students: the share of students in the lowest reading level decreased significantly from 57 to 43 percent in 2015, although this figure is still high compared to other countries in the region and OECD countries (Figure 3.1, panel A). The average student in Colombia lags the average OECD student by the equivalent of 3 years of schooling (learning). Learning gaps are also large between population groups in Colombia. Rural students lag urban students by the equivalent of one year of schooling, and the poorest students lag the

10 OECD (2016)
11 Kautz et al. (2014); OECD (2015a); Cunningham, Acosta and Muller (2016).
12 Gimenez and others (2015); OECD (2015a).
13 Heckman and Mosso (2014).
14 Idem.
15 OECD (2016a).

Figure 3.1 Low levels of skills



Source: OECD (2016) based on PISA 2015.

richest students by the equivalent of three years of schooling (Figure 3.1, panel B).

Low levels of learning and insufficient focus on socioemotional skills mean that graduates often do not meet the demand for skills in the labor market. In addition to low cognitive skills, a large share of adults also lacks socioemotional skills.[16] A 2016 Manpower Group global survey on employers' difficulties to find the right profile to fill their positions placed Colombia 12th out of 43 countries.[17] In most of the countries, the main reason for this was lack of applicants (24 percent), but in Colombia lack of skills headed the list (30 percent). Half of the Colombian employers claimed difficulties in finding suitable people for their jobs.

Addressing low skill levels needs to start with good quality early-childhood development programs. Poor children enter formal education with development deficits, and they continue to do badly throughout the education system. Children with low cognitive development learn less and are more than 9 times more likely to have dropped out before they enter upper secondary education than children with high cognitive development.[18] They are also 6 times more likely to have repeated a grade. Colombia's early child development (ECD) strategy, "De Cero a Siempre" (From Zero to Forever), provides comprehensive care for pregnant women and children in early childhood. The strategy has had impressive results in coverage, and there is an increasing focus on improving quality of services. The biggest challenge is in the quality of the interactions and pedagogical practices in the classroom. For instance, most teachers need to strengthen the connection between learning and children´s experiences; they also need to plan more systematically and place a strong focus on learning. The steps taken towards a comprehensive ECD quality assurance system need to be consolidated and expanded.

The education system also needs to streamline its planning to get schools what they need

16 Acosta, Muller and Sarzosa (2015).
17 ManpowerGroup (2018).
18 Fuertes and Rodríguez (2017).

to improve learning. Colombia has a long tradition of measuring and focusing policies on learning outcomes, but implementing these policies often conflicts with those goals. Schools have autonomy over the curriculum, but they manage an extremely low share of resources and have very little autonomy in their use; they rely on the central government, *Entidades Territoriales Certificadas* (ETCs; Certified Territorial Entities) and municipalities for financial and resource inputs, including human resources (teachers, coordinators). ETCs and the central government often lack the information and administrative capacity to identify the schools' needs, resulting in a mismatch between the needs of schools and the targeting of programs and resources. In addition, this cumbersome management generates a heavy administrative burden for school directors and leaves little time for pedagogical leadership. The financing system is also fragmented — schools receive funding from up to eleven different sources. Education transfers within the Sistema General de Participaciones (SGP; General System of Participations) are used mostly for salaries, leaving little for quality investments. In addition, they do not provide the right incentives for ETCs to focus on increasing efficiency or improving quality.

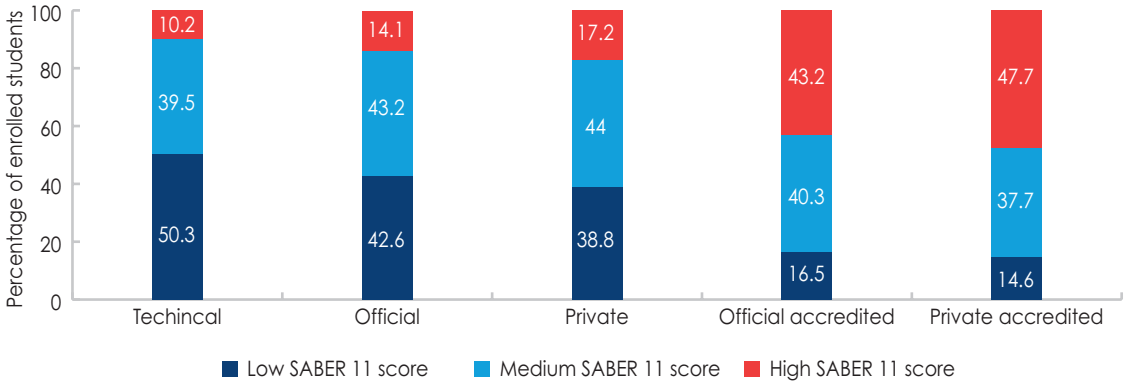
Upper secondary education is not preparing most students for tertiary education or the labor market

Upper secondary education has not received the financial and strategic support it needs. The National Development Plan 2014–18 established universality of upper secondary education as a target by 2025 in urban areas and 2030 in rural areas. Yet, enrollment rates have stagnated in the past 5 years. While upper secondary should act as a bridge between basic and tertiary education, it is the last formal level of education for more than half of Colombian youth. Adolescence is a key period for learning socioemotional skills[19], yet upper secondary is currently focused on the consolidation of basic competencies, not broad skills. In addition to suffering from the same problems as basic education, the lack of a graduate profile and curricular autonomy result in large heterogeneities in what students learn. In addition, many students, especially poor or rural children or those from an ethnic minority, enter upper secondary with severe skill deficits that are not addressed systematically. As a consequence, most graduates leave upper secondary education without the skills to succeed. While resources are not the only challenge, government spending on upper secondary is lower than on any other educational level and low compared to other Latin American countries and OECD members: Colombia spends US$2,000 per student compared to US$4,000 in Argentina or US$3700 in Mexico (in power purchasing parity).

The quality of upper secondary education determines students' future options. Students with lower results in SABER 11 (exit exam) are more likely to attend technical programs and programs without high-quality accreditation, whereas students with the best scores go to high quality, accredited institutions (Figure 3.2). The former also tend to have higher drop-out rates: 47 percent for the students with low results in Saber 11, compared to 30 percent for those with the best results. One of the most unfortunate aspects of the challenges to the education system is that students with poor academic performance are also more likely to come from poorer social backgrounds. Low quality

19 Guerra, Modecki, and Cunningham (2014).

Figure 3.2 Enrolment in institutions 2015, by students' score level in Saber 11 and type of institution



Sources: ICFES, Ministry of Education, and SNIES.

upper secondary education does not prevent the perpetuation of inequalities later in life.[20]

Quality tertiary education needs to be accessible to more young people

Despite impressive improvements, access to good quality tertiary education is still highly unequal. Only 11.3 percent of students from the poorest families enroll in tertiary education, compared with 56.7 percent from the wealthiest ones. Regional disparities are also stark: five departments account for two-thirds of all undergraduate students in the country.[21]

The quality assurance system for tertiary education needs to cover more institutions, recognize the diversity of the system and provide incentives for continued improvements. Colombia's tertiary education quality assurance system was a recognized pioneer in Latin America, but it has not evolved to respond to rapidly changing needs. Licensing requirements (the minimum to operate) are too lax, while the requirements for high quality accreditation are too stringent and too focused on research capabilities of institutions.[22] As a result, many institutions do not even seek accreditation, as their institutional goals do not include research. Accreditation is also very costly and cumbersome, with long and repeated processes to obtain and renew accreditation. Importantly, it focuses on inputs rather than outcomes and as a result, accreditation system coverage is insufficient. In 2017, high-quality accreditations covered only about 11.7 percent of the programs and 17.4 percent of the institutions. While 44 percent of university students are enrolled in high-quality programs, the equivalent share of students in technical and technological programs is 9.1.[23]

20 Half of students whose family income is lower than the minimum wage, who are highly likely to have developed large deficits, performs at the bottom two quintiles on SABER 11 (the national upper secondary examination), and only one in ten in the top quintile. Low scores severely limit their options for tertiary education. According to the Ministry of Education, only 38 percent of upper secondary graduates transit to tertiary education during the year after completion, and many of those who do, do so without the necessary skills to succeed in tertiary.
21 SEDLAC (2018).
22 OECD (2016b).
23 Gónzalez-Velosa et al. (2015); Camacho, Messina, and Uribe (2017).

The financing system is another major obstacle to access, quality and equity. Tertiary education institutions have been running deficits for years, and their financing system is inefficient and rigid: budgets are linked to the inflation-adjusted costs registered by the institutions in 1992 and do not take growth in enrollment (or any other outcomes) into consideration. Moreover, the system has generated great disparities between funding allocations to different types of institutions, particularly affecting regional institutions and non-university institutions. This financing model also does not incentivize good performance and results, affecting in particular regional and non-university institutions.For example, in 2017 the allocation per student to technological, technical or university institutions was, on average, 17 percent below the allocation per student of public universities.

Youth often enter the labor market with low skill levels and receive limited support for improving employability

Youth employment programs are fragmented and limited in coverage, even for at-risk youth. In the last decade, the government has implemented a range of policies and programs to address supply and demand constraints that prevent youth from effectively transitioning into labor markets.[24] These interventions include apprenticeships, entrepreneurship programs, public employment services, vocational and socioemotional skills trainings, and wage-subsidy programs. They respond to different institutional objectives, have different target populations and types of benefits with varying implementation capacities.[25] Recent policies aimed at providing an articulated approach for youth employment have not yet translated into operational results. Despite the number of programs and 2 million beneficiaries (1.2 million excluding public employment services), they represent less than half of 4.7 million youth who are *ninis* and informal workers.

Youth employment programs face outreach and quality issues. Some interventions do not reach the most vulnerable as a result of inefficient outreach mechanisms and program content, even though they may have adequate coverage. Most employment services are provided by the National Learning Service (*Servicio Nacional de Aprendizaje*, SENA) and the Public Employment Service, which do not have sufficient outreach efforts and ease of utilization to ensure adequate take up. In other cases, there are limitations arising from the implementation of programs. For example, youth without completed secondary education (37 percent of those who graduated from basic secondary) are not eligible for major skills formation programs like SENA. In addition, other programs like the Ministry of Labor's *40,000 Empleos* wage subsidy program did not adequately target informal or vulnerable youth in its early implementation as it was implemented through the Family Welfare Funds (*Cajas de Compensación Familiar*), which are territorial entities that provide services to the contributory formal workforce. More importantly, some interventions with potential impact on skills upgrading have limited linkages to labor market demands. Training programs like the Department for Social Prosperity's (DPS) *Jóvenes en Acción* (a classroom and on-the-job training

24 Youth's constraints in the labor market can be defined in two groups: (i) "supply constraints" as lack of job-relevant skills and experience, job-search capacity, constraints to set up a business, restricting social norms, etc.; and (ii) "demand constraints" as lack of demand of employers for youth work, financial disincentives, employer discrimination, etc. Cunningham et al (2010); Kluve et al, (2016).

25 These institutions include the Department for Social Prosperity, the Ministry of Agriculture, the Ministry of Education, the Ministry of Labor, the National Training Agency, among others.

for youth with stipends) relies on the existing institutional package offered by training institutions, which in many cases is not aligned with changing local labor needs or interest from participants.

These programs have uneven financing mechanisms that limit medium-term planning and weaken the potential for synergies. Some programs are financed through special, short-term budgetary allocations with unclear future funding. For instance, the *40,000 Empleos* wage-subsidy program was financed with the unused resources of the FOSFEC revenues for the 2015 exercise only, and does not have a specific allocation for the following years.[26] Programs like *Jóvenes en Acción* have a regular budgetary allocation that partly reflects the existing commitment to multiyear programs (e.g. stipends during university careers), but still face lack of clarity in terms of the targeted coverage, distribution by type of subprograms (university, technical), and the implications for medium-term cost implications. This unclear medium-term financing of some of the active labor-market programs for youth (ALMPs) affects the planning and the development of synergies across them. Conversely, the main training provider, SENA, is funded by payroll contributions which represents a more stable stream allowing for greater planning of service provision.[27] This uneven financing mechanisms create different incentives on the implementation agencies from ensuring full and quick execution to maintaining expenditure capacity that weakens the incentive for coordination across agencies.

Existing monitoring and mechanisms limit the capacity for enhancing coordination and increasing efficiency. Youth ALMPs have limited monitoring and evaluation instruments, and although some programs have implemented rigorous impact evaluations, most have limited evaluation or weak performance.[28] Lacking a set of results indicators that can be monitored during implementation reduces the transparency of public resources and the potential for coordinated action on the ground. As a result, funding is not linked to specific outcomes but associated to inputs or outputs of specific interventions.

Policy Options

Improving youth outcomes needs a combined strategy of skills upgrading and active support in the transition to the labor market. A skill upgrading strategy needs to start by providing good quality ECD programs and a focus on learning during basic and upper secondary education. It also needs to facilitate transitions between levels of education, where most repetition and drop-out occurs, and to improve access and quality of tertiary education through a reform of the quality assurance and financing systems for tertiary education. Supporting transitions to the labor market requires (i) aligning technical education and training with the needs of the private sector in the management of the skills development system; (ii) offering pathways to return to the formal education system for drop-outs; and (iii) expanding effective active labor market policies.

26 FOSFEC is the Solidarity Fund for Employment Promotion and Protection against Unemployment (*Fondo de Solidaridad y Fomento al Empleo y Protección al Cesante*) that delivers family allowance funds, social insurance unemployment benefits, and other benefits through the *Cajas de Compensación Familiar*. Collected earmarked taxes are added to the fund every year and are not exhausted.

27 Specific interventions like *SENA Emprender* (entrepreneurship program) have the capacity to raise funding from other sources as well.

28 See, for instance, Attanasio et al. (2017) and DPS (2017) for impact evaluations of *Jóvenes en Acción*.

Upgrading Skills

Improving the quality of early childhood education, basic education and upper secondary education

Financing and governance of the system. Truly aligning the education system to get schools what they need to improve learning would require governance and financing reforms at ECD, basic and upper secondary education levels, but those are highly complex reforms. In ECD, financing is concentrated in the Colombian Institute for Family Welfare (*Instituto Colombiano de Bienestar Familiar*, ICBF), but service provision is regulated by the Ministry of Education and the quality assurance is carried out by local governments. An ideal reform would increase funding through the Ministry of Education and ETCs (through the *Sistema General de Participaciones*, SGP), to ensure adequate funding and link resources to quality of service. In basic and upper secondary education, the financing system is highly fragmented, earmarked and with very low autonomy in the use of resources at the school level. In basic and upper secondary education, the priority should be to set up the systems for the education system to respond to the needs of schools by (i) consolidating fund flows to reduce the number of instances that receive transfers and the number of earmarked transfers to increase efficiency; (ii) giving more resources and increased autonomy to schools in the use of resources, compensating for equity considerations; (iii) introducing performance incentives in the SGP; and (iv) increased transparency and accountability in the use of resources, especially to the school community.

Quality would be improved by focusing on two cross-cutting themes that affect all levels of education: (i) improving quality measuring and assurance systems; and (ii) focusing on pedagogical support programs. In addition to these, upper secondary education needs a fundamental transformation in order to expand the set of skills it provides to prepare students for tertiary education or the labor market.

Quality assurance system for ECD. Colombia is one of the few countries that have measured both child development outcomes and service delivery indicators for ECD, and these measurements should occur periodically in a sample of children and institutions. While coverage of ECD programs needs to improve, building on the successful ECD strategy *De Cero a Siempre*, the priority should be to use these measurements of child development and service delivery to developing an effective quality assurance system for early childhood development programs, especially in rural areas and for community-based modalities. In implementation, the Ministry of Education and ETCs should have a stronger role in financing and enforcing this quality assurance system to balance the prominent role of the ICBF in the financing and provision of ECD services. The National Development Plan 2014–18 included the development of these systems as a target for 2018. While the basis of these systems has been developed, their implementation still needs to be defined and rolled out.

Better information on the needs of schools to improve learning using the new System of Education Quality Management *(Información y Gestión de la Calidad Educativa*, SIGCE). The SIGCE is designed to give comprehensive information about each school in 6 dimensions of quality in a user-friendly and actionable format to all actors in the system (schools, parents, ETCs and central government). The system was reformed in 2017, and could potentially transform how the system is managed if it is properly used. However, it is not currently used widely for decision making. Without significant changes to the governance and fi-

nancing structure of the system, information should be the cornerstone of the management of the sector to ensure that all actors are using the same information to identify and solve the needs of schools.

Extend school leadership and pedagogical support programs but improve their sustainability. Programs like *Rectores Lideres Transformadores* and similar school leadership programs, *Todos a Aprender and Jornada Única* (full time school which has a strong pedagogical support component) have proven effective in raising learning outcomes, but they are costly and sometimes inefficiently targeted. While these programs should continue and be expanded, they could be implemented more efficiently through mentoring networks for teacher and directors, or by decentralizing their implementation to ETCs. In the case of *Jornada Única*, which extends the school day by at least one hour, there is also a need to roll out the program efficiently. As extending the school day is very costly for a school (because it may need additional infrastructure and extra teachers), the program should take into consideration teacher distribution and existing infrastructure to expand while minimizing the cost of the operation.

Upper secondary education reform. In addition to better information and pedagogical support, upper secondary education is also in need of a fundamental transformation, focusing on skills (cognitive, socioemotional, and technical) instead of basic competencies. A strategic reform would require (i) identifying the skills a graduate should have through a graduate profile; (ii) developing a teacher profile; (iii) expanding promising pilot initiatives to improve skills for students (currently through the *Fondo de Educación Media*) and improve pedagogy and management (currently through the program *Todos a Aprender*); and (iv) expanding the counseling to students on possible study paths and careers. Other countries in the region (Brazil, Mexico, Peru, Uruguay) have realized the importance of this shift and are implementing reforms aimed at changing the focus of upper secondary education to skills. Short-term options to improve upper secondary education could include (i) expanding demand-side support through *Jóvenes en Acción* for upper secondary education students; (ii) expanding the *Fondo de Educación Media*, which provides leveling courses to students at risk of dropping out, but considering alternative implementation modalities that reduce the cost per student (such as non-university partners); and (iii) increasing the focus on socioemotional skills through existing mechanisms like the *Cátedra de la Paz* (Chair of Peace) and *Competencias Ciudadanas* (Citizenship competencies). In addition, medium-scale piloting of drop-out prevention programs such as the *Programa de Oportunidades y Desarrollo para Evitar Riesgos* (PODER) in Mexico, which combine tutoring with cognitive and socioemotional skills interventions, could prove effective in preventing drop-out and improving transitions to tertiary education.

Supporting transitions to tertiary education through better information, financial and academic support.

Providing better information and guidance through socio-occupational support. There are many initiatives to provide information to upper secondary students such as *Buscando Carrera* (providing information about degrees) and *Observatorio Laboral de Educación* (providing information on graduate salaries), but students are generally not familiar with these tools. More career guidance and academic support is needed to navigate these options, especially for the most disadvantaged students. Adequate guidance and information can help students to construct a

strong and positive self-image, define their interests based on their capacities, and consolidate employability skills.

Increasing demand-side financing and improving its sustainability. Colombia is a pioneer in financing tertiary education through student loans, providing disadvantaged students with interest rate and subsistence subsidies. These programs have shown to increase enrollment and reduce drop-outs.[29] They should increasingly support accredited programs and institutions in order to incentivize quality, increase beneficiaries' return to education, and improve repayment rates. The *Ser Pilo Paga* program, introduced in 2014 as a large merit- and needs-based scholarship program, has contributed to eliminating barriers to entry into top private universities for the best students from disadvantaged backgrounds. However, considering the fiscal situation of the country, the sustainability of the program would depend on introducing cost savings or cost-recovery mechanisms to guarantee resources for future cohort (see next recommendation).

Improve the quality of tertiary education

A reform of the tertiary education financing system is urgent. The public university system needs more resources to cover the current deficit. These resources are necessary and should be linked to enrollment and quality improvements. The transfers to public institutions should be based on numbers of students. Additional funding mechanisms should be linked to results in quality improvements.

Promote equity in access by promoting income-contingent financing for tertiary education. Students financed under this modality would receive tuition support, but repay a portion of the cost of their financing throughout their professional lives; levels of repayment would depend on income upon graduation. Income-contingent financing can remove barriers to accessing tertiary education, while improving the financial sustainability of the tertiary education system and cutting the cost of loan defaults for students. This modality could replace *Ser Pilo Paga*, as it would have the same benefits as that program (removing access barriers) but would be more sustainable; part of the scholarship would be recovered throughout the life of the graduate. Colombia has taken the necessary steps to set up the system, and details of implementation will be crucial for its success.

The quality assurance system for tertiary education needs to be reformed to (i) recognize the diversity of institutions, especially non-university institutions; (ii) focus more on outcomes in the quality assessment; and (iii) develop institutional capacity for an effective and efficient quality assurance, including the enforcement of least requirements to operate. The current accreditation system is too narrowly focused on universities that have research capacity, effectively leaving many institutions outside of the quality assurance system, especially technical and technological programs and institutions. To improve efficiency of existing quality assurance processes, the plurality of information systems should be articulated into a centralized system. A broad reform could also include more autonomy, efficiency, and coherence for quality processes by concentrating all quality assurance functions into a single agency.

Provide active and systematic support for transition to the labor market

Strengthen the policy framework for youth employability. Youth employability policies should

29 Sanchez (2014).

prioritize specific populations and align interventions to achieve the expected results of improved skills and employability. Existing policy coordination entities, such as the CIGER (*Comité Intersectorial para la Gestión del Recurso Humano*), part of the national competitiveness system, needs to strengthen its policy coordination and its monitoring roles to ensure results for specific populations. CIGER could also include entities like DPS to ensure that employability interventions, even for the most vulnerable, are linked to strategies to improve national competitiveness. In addition, more in-depth systematic and rapid sector-level assessments could build on existent sources of information and institutions, such as sectorial committees (*mesas sectoriales*), the National Qualifications Framework, and labor observatories. These assessments would be the basis for defining sector strategic action plans to improve competitiveness, involving heavily the private sector needs in more formal settings (such Chambers of Commerce) or in less institutional contexts (trade unions of microenterprise organizations). The actions plans could provide guidance on designing effective skills interventions specific to the sector and region being analyzed, with a proper monitoring and evaluation system, At the territorial level, these activities should be led jointly by the Ministry of Labor, Ministry of Education, SENA, but more importantly in close collaboration with representatives from the private sector such as *Consejo Privado de Competitividad*, National Business Association (ANDI), the Society of Colombian Farmers (SAC) and Chambers of Commerce.

The private sector should also take a more active role in facilitating provision of skills. Initiatives such as *mesas sectoriales* have been essential for nurturing the dialogue between academia, the private sector and policy makers, and for taking the skills policy forward.[30] SENA's apprenticeship program, *Contratos de Aprendizaje*, requires firms to meet a quota of apprentice hires or pay an equivalent amount (monetization of the quota). However, true ownership of the private sector in the production of skills for the job could be taken further. World leaders in the development of skills implement Technical and Vocational Education and Training (TVET) programs where the private sector plays an active role in the provision of skills supply, from funding (Germany) to managing public training centers (South Korea, Singapore).[31]

Improve pathways for continued skills upgrading. Young people who are not in work or school need retraining. Vocational training is most appropriate and would need to be combined with socioemotional skills formation or entrepreneurship programs. Stronger and clearer pathways should be provided to students to move between institutions and advance from one level to the next. Development and implementation of a National Qualifications Framework and Credit Transfer System should be accelerated to facilitate this type of integration.

Strengthen subsidized employment and direct employment programs (such as wage subsidies, labor-intensive public works). The current scope of these programs is limited, and most have not been evaluated rigorously for their impact and cost effectiveness. Global evidence on wage subsidies shows limited impacts on employment unless they are closely tied to increased productivity interventions (such as skills formation). Linking programs like *40,000 Empleos* (wage subsidy) to training packages such as those provided by SENA or with incentives like *Jóvenes* could be an area for piloting,

30 For further information see the evaluation of *Mesas Sectoriales* (SENA, 2014).
31 Singapore's Institute of Technical Education with substantial autonomy under the guidance of a board of governors whose members include private sector business leaders and has strong ties to the private sector.

evaluation, and program revision. In parallel, labor-intensive public works can be effectively used in case of emergencies (natural or economic) as these programs can play a risk-coping role with a limited duration, such as the Emergency Employment program during the *Ola Invernal* in 2010.[32] Given the recurrence of emergencies in Colombia, these represent an opportunity to enhance youth participation in training and employment when opportunity costs are lower.

Across interventions, performance-based financing mechanisms should be designed to increase accountability and ensure relevance of interventions. Performance-based financing could enhance the technical relevance of each intervention, but more importantly, could ensure that synergies are exploited. For instance, Chile implements a results-based budgeting where transfers from one agency are made to say, specific intermediation providers when they cover a group of TVET trainees, typically from most vulnerable groups. This would need stronger management information systems across implementing agencies, especially among those controlling the budget allocation decisions.

Annex 3.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Improve early childhood education (ECD), basic education and upper secondary education	• Introduce Quality Assurance System for ECD • Improve use of information for decision making (*Sistema de Gestión de la Calidad Educativa*) • Strengthen pedagogical support programs - PTA, *Jornada Única* and School Leadership Training • Strengthen socioemotional skills of graduates • Support transitions (subsidies and academic support, skills leveling)	• Include in the general transfer system SGP basic cost of ECD provision • Consolidate transfers and grant more resources and autonomy to schools • Reform upper secondary education: create graduate profiles; develop a teacher profile; pedagogical transformation
2. Improve tertiary education	• Introduce quality assurance system for tertiary education • Pilot income-contingent student loans • Establish performance-based transfers to public institutions	• Based on a pilot, implement income -contingent student loans on a large scale • Move most financing to public institutions to be performance based
3. Strengthen labor market transitions	• Unify targeting mechanisms for labor market programs • Involve private sector in skills training	• Consolidate youth programs by creating a Youth Policy Framework and Institutional Consolidation • Establish a Skills Agency with strong private sector leadership • Reform and consolidate financing by linking it to performance

32 See http://www.colombiahumanitaria.gov.co/Damnificados/Paginas/ApoyosGeneracionEmpleo.aspx

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NOTE 4

PENSIONS

Colombia's pension system reform of 1993 remains unfinished. Pension coverage is low, while highly subsidized public pension funds engage in unfair competition with private funds, resulting in regressive income redistribution, fiscal pressures, and underdeveloped annuity markets. Lump-sum benefits at retirement are prevalent, undercutting the main goal of the pension system to provide consumption smoothing. These problems are expected to become even more acute as Colombia faces sharply accelerating population aging.

The reform agenda is comprehensive. It should address regressive income redistribution through parametric reforms, which will also ensure financial sustainability of the public pension schemes and allow private pension provision to grow. Revised minimum pension policy would help to increase pension coverage. Comprehensive policies to develop the annuities market should result in true old-age income insurance and consumption smoothing.

Context And Reform Progress

The contributory pension system in Colombia is characterized by low coverage, costly and regressive redistribution, and prevalence of sub-optimal lump-sum benefits at retirement. Since 1993, the system has consisted of two parallel competing regimes: the public Pay-As-You-Go (PAYG) Defined Benefit (DB) scheme known as *Regimen de Prima Media* (RPM) mostly managed by *Colpensiones*[1], and a fully funded Defined Contribution (DC) scheme *Régimen del Ahorro Individual con Solidaridad* (RAIS), run by private pension fund management companies *Administradoras de Fondos de Pensiones* (AFPs). The high level of informality in the country results in less than 35 percent of the labor force contributing to a pension scheme. Due to stringent eligibility conditions the proportion of pension recipients among the elderly is expected to fall from 37 percent today to only 17 percent in a couple of decades. In 2016, *Regimen de Prima Media* ran a deficit of 3.4 percent of GDP; this is estimated at 3.7 percent for 2017.[2] High income earners are the main beneficiaries of RPM, which offers

1 Pensions for some civil servants, uniformed personnel, and teachers are managed by other administrators.
2 *Colpensiones* was responsible for the deficit of 1.2 percent of GDP in 2016, with remaining deficit attributable to other RPM administrators, including civil servant regime FOPEP (1.0 percent), Magistrates (0.3 percent), uniformed per-

highly subsidized pensions for those with long careers in the formal sector. Private sector institutions are unable to compete for these contributors and essentially function as savings schemes for the less wealthy, as current regulations disincentivize the provision of annuities.

Faced with a high proportion of elderly people with no steady income source, Colombia has introduced two independent non-contributory old age programs. *Beneficios Económicos Periódicos* (BEPs) are voluntary pension savings accounts for people with incomes below minimum wage. The accounts are administered by *Colpensiones* and subsidized by the government at 20 percent. In 2018, the BEPs program expenses were projected at COP 104 billion (0.01 percent of GDP), in comparison to the COP 29,385 billion (3.0 percent of GDP) spending for contributory benefit programs also run by *Colpensiones*. However, BEPs accumulations are small and result in the lump-sum return of contributions at the time of retirement, rather than in annuitized payments. The second non-contributory program, called *Fondo de Solidaridad Pensional* (FSP) and administered by *Colombia Mayor*, a consortium of local governments, covers benefit payments for poor elderly people. They also provide pension contribution payments for disadvantaged younger contributors. In 2018, FSP was allocated COP1,439 billion (0.1 percent of GDP).

Main Challenges

Colombia already struggles to provide retirement income coverage to the current elderly population, and faces sharply accelerating aging in the near future. Contributory pension schemes in Colombia currently cover only 37 percent of the elderly population, and this percentage is expected to drop to 17 percent due to stringent benefit eligibility conditions. Non-contributory programs like Colombia Mayor and BEPs offer additional coverage but their scope is limited by budget constraints. The unsatisfactory current situation makes the pension's system future even more daunting. According to 2017 UN population prospects database, Colombia's old-age dependency ratio[3] currently stands at 12.6, a level comparable to that of high-income countries in 1950. It took those countries seven decades to reach their current dependency ratio of 28.8, but Colombia, like the rest of South America, is expected to cover that distance in only 25 years due to the confluence of lengthening life expectancy and a sharp drop in fertility rates. Therefore, examining current pension practices of OECD countries, including retirement ages and relative pension benefit generosity, could help Colombia plan the next 25 years, even though the current generosity of OECD pension schemes may be hard to achieve especially in the absence of strong GDP growth.

One of the key challenges for Colombia is completing the unfinished pension reform of 1993, which envisioned a further parametric reform of RPM and a reduction of its size. Since 1993, new formal labor market entrants have automatically been enrolled in RAIS, and the expectation of the reform was that the new scheme would continue gaining members at the expense of RPM. The reformers were confident that the RAIS scheme would outperform, or at least be able to compete with, RPM. RPM was expected to be further reformed given its

sonnel (0.6 percent), and others (0.3 percent). As most young civil servants are obliged to join *Colpensiones*, with time *Colpensiones* deficit is expected to increase, while transitional regimes for older civil servants, like FOPEP, are expected to be phased out.

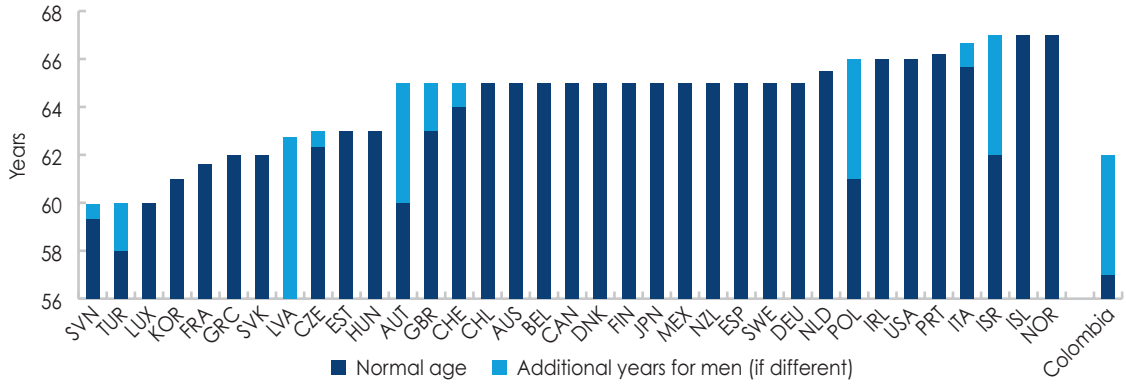
3 Here the old age dependency ratio is calculated by diving population aged 65+ by population aged between 15 and 64.

long-term financial unsustainability. The RAIS scheme was expected to help diversify longevity and investment risks, transferring some of them from the government to private sector institutions. Flexibility of switching between schemes up to the last 10 years before retirement was introduced to allay fears of the sceptics and was not seen to be a big flaw of the design.

RPM benefits remain unsustainably generous, and highly subsidized for workers with stable careers. RPM retirement ages were raised to 57 for women and 62 for men in 2014, but remain very low compared to OECD countries, as shown in Figure 4.1. The retirement benefit amounts to 65 percent of an individual's average wage for the minimum 1300-week (25-year) contribution period, equivalent to an accrual rate of 2.6 percent per year for those who have stable jobs and can achieve such a long career in the formal labor market. By comparison, accrual rates in OECD countries are decidedly lower, as shown in Table 1. Another way to look at the issue is to compare net replacement rates in Colombia with those in the broader region and OECD, as shown in Figure 4.2; net replacement rates in Colombia are high compared to the region and the OECD. This benefit generosity comes at a cost: government subsidies to RPM were an estimated 3.7 percent of GDP in 2017 and have precluded fair competition between RPM and RAIS. Offering subsidized benefits in RPM starves RAIS of sizable contributions from high-income contributors which would enable it to offer less expensive investment products to all participants. Expensive subsidies to the well-off in the RPM scheme are also using up resources that could be made available to the non-contributory pension schemes and other poverty-reducing programs.

At the same time, low and middle-income workers struggle to achieve minimum contribution period thresholds, and often fail to choose the most advantageous retirement scheme. In RPM, those who do not accumulate 1300 weeks (25 years) of contributions receive their money back in one inflation-adjusted lump sum payment, without accrued interest, which leaves people without a predictable income stream in old age. Most individuals in this situation would benefit from getting their pensions through RAIS, which has a lower 1150-week requirement to access the minimum pension

Figure 4.1 Current retirement age in 2016 for a person who entered the labor force at age 20



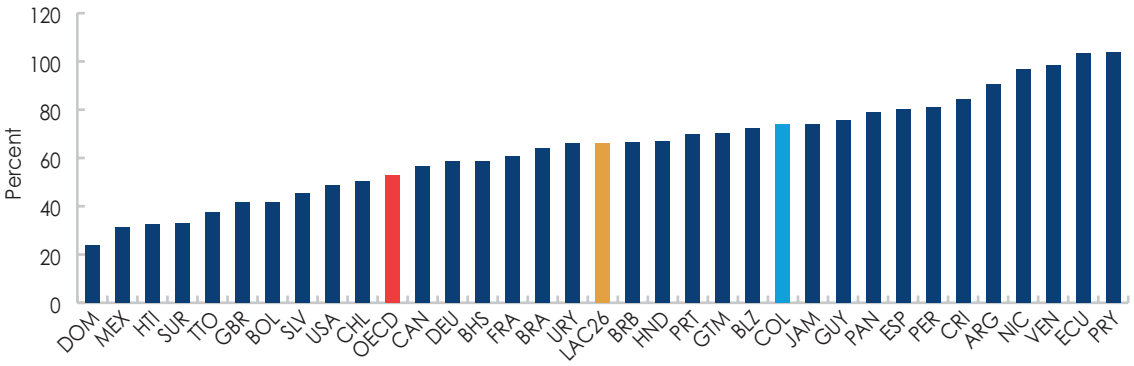
Source: Pensions at a Glance, OECD, 2017.

Table 4.1 Accrual rates in earnings related schemes in OECD

Japan	0.55	Estonia	1	Hungary	1.64
Canada	0.64	Germany	1	Turkey	1.68[w]
USA	0.75[w]	France	1.06	Austria	1.78
Greece	0.8-1.5	Slovak Republic	1.25	Spain	1.82 [y]
Korea	0.87	Belgium	1.33	Netherlands	1.85
Poland	0.91	Italy	1.46	Luxembourg	1.92 [y]
Norway	0.94	Iceland	1.47	Portugal	2.3-2 [w]
Sweden	0.95 [w]	Czech Republic	1.5-1.02		
Slovenia	0.96	Finland	1.5-4.5	**Colombia**	**1.5-2.6 [y]**

Notes [w] – varies with earnings; [y] – varies with years of service. *Source*: Pensions at a Glance, OECD, 2015.

Figure 4.2 Net pension replacement rates for full career average earners in North and South America and OECD



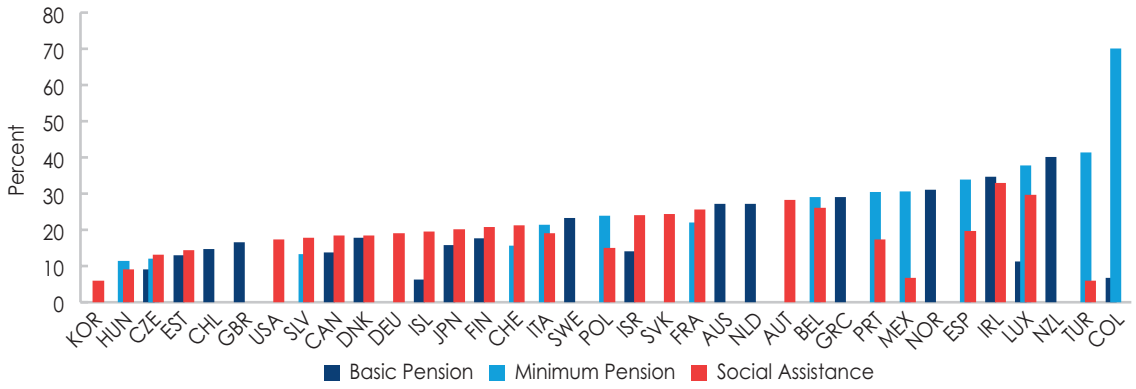
Source: Pensions at a Glance databases, 2014 and 2017, OECD.

guarantee and, failing that, returns contributions with accrued interest.[4] However, the lack of financial literacy prevents people from making the most beneficial choices. Implicitly, this means that high-income RPM beneficiaries are subsidized by lower- and middle-income contributors who transfer their accumulated balances to RPM and effectively subsidize it with no-interest loans. These account transfers to RPM are booked as current income and partially mask the RPM's financial unsustainability. To the extent that the low- and middle-income earners do make an advantageous choice of RAIS and people with higher incomes choose RPM, the system is converging into one where RAIS only pays pensions that are equivalent to the minimum benefit guarantee.

The fact that the RAIS ends up paying mostly minimum pensions represents significant poli-

4 Active RAIS members contribute 0.5 percent of their income to the *Fondo de Garantía de Pensión Mínima* (FGPM). The fund is used to guarantee a minimum pension for individuals who reach age and contribution period eligibility requirements, but have insufficient pension savings to purchase an annuity (or phased withdrawal) with that value.

Figure 4.3 Minimum benefits relative to average wage in Colombia and OECD, 2014



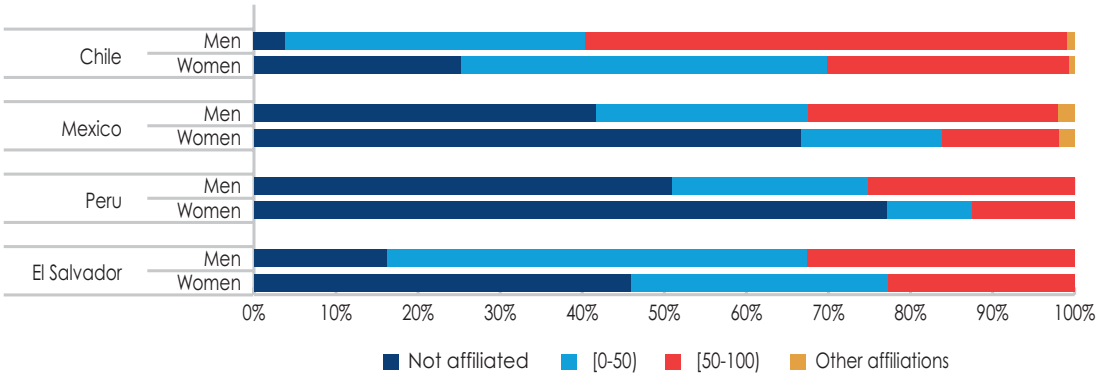
Source: Pensions at a Glance databases, 2015, OECD.

tical risk. Recent regulations facilitate greater access to the Minimum Pension Guarantee Fund (FGPM). Since transferring longevity risk to private sector intermediaries is an essential feature of the private pension system, the possibility of transferring this risk back to the government through the FGPM may become a political liability for the RAIS. The value-added of the private pension scheme can be questioned in a context where RAIS contributors receive a minimum pension simply by achieving age and contribution period requirements, independent of their contribution amounts and investment returns, while longevity risks are transferred back to the government through the FGPM.

The high level of the minimum pension, which is set to equal the minimum wage, is an important source of distortion in Colombia's pension system. Salary structure in Colombia is highly concentrated at low wages, and the minimum wage stands at around 70 percent of the average wage, a highly distortive level that precludes further labor market formalization. Furthermore, Constitution directs that minimum pension should equal minimum wage. Figure 4.3 shows that in most OECD countries the minimum pension benefit does not reach even half that level and demonstrates that this policy is fiscally unsustainable in the long run in the society that is expected to age rapidly. Since financing such a high minimum pension becomes expensive, this leads to the prolonged minimum contribution period requirements. Ironically, the desire to protect workers from insufficient retirement incomes by setting a high minimum pension level pushes a high proportion of contributors away from the system, leaving them with no retirement income at all.

Another challenge, closely related to the unfair competition between the two schemes, is an under-developed annuity market. As it is more advantageous for high-income individuals to retire through the RPM scheme, there is little demand for annuities in Colombia from this income group. Until 2015, insurance companies and pension fund managers were not compensated for minimum pension increases that were mandated by the government for pensions already in payment. Given that few RAIS accounts can be converted into annuities safely above the minimum pension level, private intermediaries have little interest in participating in the RAIS benefit phase. Furthermore, recent regulatory changes, including

Figure 4.4 Affiliation and contribution densities in comparator countries



Source: Pensions at a Glance: Latin America and the Caribbean, OECD, IDB and The World Bank, 2017.

the *deslizamiento*[5] and Resolution 3023, create more favorable conditions for the provision of pensions under the mechanism of phased withdrawal, rather than annuities. Consequently, the possibility of domestic annuity market development rests solely with disability and survivorship annuity provision.

In addition, the current regulatory framework makes it difficult for intermediaries to run a profitable business. While private pension funds can charge up to 3 percent of income as fees, this limit includes the cost of insurance of disability and survivorship (IDS). As benefits of IDS are most generous in relative terms compared to other countries in the region, net fees received by the pension funds may not be enough to compensate for their risks. While the IDS operates on a self-insurance principle, it is impossible to identify its market price. Only economic groups, normally made up of an AFP, an insurance company and an investment company, can remain profitable when offering annuities, and treating the business as a package rather than as a collection of separate business units. This approach damages competition in financial markets and creates dependence on existing economic groups.

Even with needed contributory pension reforms, labor market informality in Colombia is likely to persist, resulting in a large coverage gap and low contribution densities. Colombia's 35 percent coverage rate is not exceptionally low compared to other countries with high informality rates in the region, as shown in Figure 4.4. Even in Chile, contribution density remains low, especially for women. Given the fact that the contributory system serves and is likely to continue serving the higher-income population with stable employment for the foreseeable future, its continued subsidization from the general budget cannot be condoned.

Policy Options

Given the multiple challenges that face the Colombian pension system, the reform agenda in this area needs to be comprehensive. It needs to tackle the issues of harmful competition between the two contributory pension

5 The *deslizamiento* is a parameter set by the government on annual basis, which sets the maximum increase on pensions that must be financed by the insurance company or pension fund management company.

schemes, address regressive income redistribution, help develop the annuities market to provide true old-age income insurance rather than lump sum payments, and ensure financial sustainability of pension schemes in the long run. Pension system fragmentation and incomplete coverage should also be addressed.

Parametric reforms of the RPM are needed to eliminate subsidies to high-income contributors. Such reforms normally entail an increase in the retirement age as well as revisions to the level of net replacement rates and minimum pension. Raising contribution rates is often proposed as a more politically acceptable reform, but it carries a risk of pushing more people out of formal labor markets and pension insurance scheme and cannot bring the system into financial equilibrium on its own.

Capping the income insured through the RPM system is also worth considering. PAYG reform is usually a politically difficult and slow process, while demographic developments and the need to provide old-age insurance for the middle- and lower-income elderly necessitate quick action. Capping the insured RPM income at around 2-3 average wages would make the scheme unattractive to high-income individuals, who may decide to remain in the RAIS scheme, rather than switch to RPM ten years before retirement, something that is currently very common. This could help reduce the size of the RPM faster and would provide a welcome boost to financial and annuity market development. Such actions are likely to create temporary fiscal strain on RPM finances, as revenues would decrease without a strong stream of transferred higher-income account balances from the RAIS scheme. Therefore, the introduction of an insured income ceiling should be well-planned, possibly include transitional arrangements, and be combined with other parametric reforms.

Special pension regimes also merit reform. The retirement age for teachers is currently 52 and 57, for women and men respectively, and these ages could be equalized with those in the general system. Armed forces pensions with replacement rate of up to 95 percent of basic salaries plus benefits and no age limit for retirement are also very generous. It would be reasonable to set lower age limits for these retirees compared to general population, but current eligibility conditions that rely only on length of service could be strengthened with minimum age requirement.

Lowering eligibility requirements for minimum pensions, combined with a lower minimum pension level, would allow a higher proportion of the middle class to qualify for annuitized benefits. While this reform would require a Constitutional change, its effects would be far reaching, as it would increase coverage of the elderly in contributory scheme. It is essential that both elements of reduced eligibility requirements and reduced benefit are incorporated into any proposal to ensure financial sustainability. The best way to introduce such a reform would be to freeze the minimum pension level in nominal or real terms for several years while slowly phasing in moderately lower eligibility requirements.

Unbundling regulatory requirements is essential for developing a healthy annuity industry. It would allow each business unit of economic groups to run their businesses profitably. The 3 percent cap on fees creates an unstable equilibrium, as pension fund management business is not profitable and gives the impression of protecting consumers. Creating mechanisms for revealing market prices for services provided by intermediaries may help to support changes in the regulatory framework. Regulatory changes should: (i) ensure that the parameters for calculating the additional amount (*suma*

adicional)[6] are based on market parameters, including the technical interest rate; (ii) centralize the provision of disability and survivorship insurance, as is the case Chile and Peru; and (iii) use auction prices as a guide to evaluate the possibility of unbundling the 3 percent fee cap that pension funds are allowed to charge contributors.[7] To the extent that the cost of disability and survivorship insurance is determined to be significantly above 2 percent in a competitive auction setting, the 3 percent limit would need to be revised.

The participation of foreign insurance companies would contribute to greater competition in the annuities market, but their participation is not guaranteed under current conditions. Judicial risks need to be mitigated as these are potentially a major impediment for international participants. Under the current legal framework, local court rulings often have unpredictable effects on intermediaries' capital, it is difficult to price this risk, and as a result, judicial risk could be a significant deterrent to market entry. Improved communication with clients regarding their rights and products sold, for example through an ombudsman's office dealing only with pension issues, increases the accountability of judges; improvements in judges' financial education would help mitigate the judicial risk.

Better non-pension instruments for contributors who are ineligible for minimum pensions need to be developed. Limiting lump sum payouts and requiring mandatory conversions of old age savings into periodic payments would reduce the risks of falling into old-age poverty. This would also reduce the pool of potential beneficiaries of non-contributory pensions, resulting in more financially sustainable programs. While the current subsidy to contributors who move their accounts to the BEPs program is attractive (an additional 20 percent to the individual account), few people use it. Default options that would move the accounts of individuals from the AFPs or RPM to BEPs in cases where minimum pension eligibility conditions cannot be achieved may dramatically increase the participation in the BEPs program. Alternatively, campaigns to provide information to these individuals by phone or by text could also help increase the awareness.

While the role of a state insurance company in the provision of non-pension annuities from BEPs accounts is adequate in the short term, it would help bring in private sector competitors. Currently, the main deterrent for private sector participation is judicial uncertainty about a non-pension product in this market: insurers do not want to be found liable for paying top-ups to minimum pension level. Instead of running a state insurance company, the government could offer protection to private market participants to avoid this.

More analytical work is needed, despite much analysis and diagnosis of Colombian pension system done in recent years. The World Bank provided an overall assessment of the funded pension scheme in 2012, and an analysis for the implementation of a centralized insurance of disability and survivorship (2015). In addition, IDB (2015), OECD (2015), Ministerio de Trabajo (2015) and presentations made by *Asofondos,*

6 The *Suma Adicional* is the amount of money that the provider of the IDS gives to the pension fund management company for purchasing an annuity. To ensure that the amount of the *Suma Adicional* is sufficient for purchasing the expected annuity, it is essential that the parameters are calculated based on market parameters including the technical interest rate, and the mortality tables. Since currently these parameters are not aligned with market conditions, the resulting amount might be insufficient.

7 The maximum AFP charge equal to 3 percent of contributor's salary includes the cost of disability and survivorship insurance, and asset management fee.

Fedesarrollo, and other stakeholders have provided valuable information for this work. More analytical work and estimations are needed to assess the implications of the proposed reforms. The World Bank stands ready to offer further analysis and its own proprietary Pension Reform Options Simulation Toolkit (PROST) for this purpose. Finally, a study on the remaining challenges for the annuities market development would be useful.

Annex 4.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Reform the pension system	• Introduce parametric reforms to the pubic pillar (Regimen de *Prima Media*, RPM): eliminate gender gap in retirement ages/increase retirement age; reduce pension accrual rate; review the generosity of special pension regimes • Introduce insured income ceiling in RPM • Unbundle regulatory requirements for annuity provision from regulations for other financial services • Centralize auction of the insurance of disability and survivorship	• Review minimum pension policies • Mandate conversion of lump sum payments of old age savings into periodic payments.

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NOTE 5

SOCIAL PROTECTION SYSTEM

The peace building process underway brings opportunities and challenges for further consolidating and increasing the social gains of the last decade. Changing territorial conditions will require a greater, and more pertinent, supply of public services, creating a window of opportunity to build trust in government where service provision was previously weak or absent. Colombia has, over time, adopted a strong set of social protection programs, and sought to strengthen their coordination through various institutional reform efforts. To rise to this challenge in a context of limited space for further expansion of programs, the social protection sector needs to transition from a static, fragmented set of programs to a dynamic and integrated system that ensures that people receive the right support at the right time. Re-imagining public service delivery from the point of view of the users can help generate solutions that create value for users, while improving efficiency of the system.

Context And Reform Progress

Colombia has achieved significant monetary and multidimensional poverty reduction over the last decade, but income inequality remains high and there are large regional disparities. This persistent inequality also reflects low social mobility and limited opportunities for the lower quintiles and other vulnerable groups. Simultaneously addressing these persisting gaps requires a social policy vision that brings together social and productive inclusion (through access to services and enhanced income generation capacity).

Social policies access to the labor market, and higher labor incomes were central to reducing poverty and increasing shared prosperity over the past decade and a half. More than 70 percent of the observed decline in moderate poverty between 2002 and 2016[1] can be attributed to labor market components, with more people working (29 percent) and workers earning more (43 percent). In rural areas poverty reduction due to higher labor incomes is as high as 85 percent.[2] Income from transfers accounted for 15 percent of the reduction in moderate poverty and nearly 33 percent of the

1 Moderate poverty declined more than 40 percent over the last 14 years, from almost half of the population in poverty in 2002 to less than one third (28 percent) in 2016. Extreme poverty almost halved, falling from 17.7 percent in 2002 to 8.5 percent in 2016.

2 Of which 60 percent is due to increased labor income and 25 percent to greater participation.

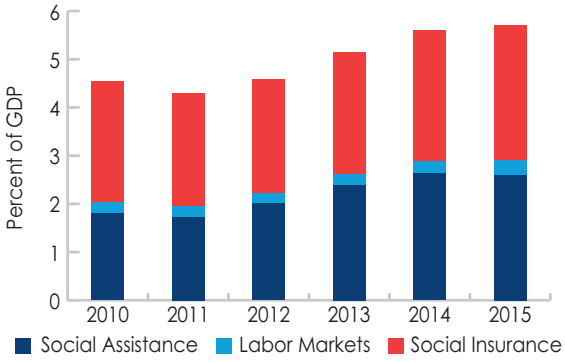
reduction in extreme poverty from 2012 to 2016. The contribution of transfers to urban poverty reduction has declined in the last four years.

The peace building process, as well as the social implications of neighboring Venezuela's economic collapse, bring opportunities and challenges for further consolidating and increasing social gains. Public policies need to adapt to the need for increases in the supply – and pertinence – of public services in conflict-affected areas and in areas with large migration inflows from Venezuela.[3] Taking advantage of this window of opportunity to build trust in government where service provision was previously weak or absent will be a key priority for the incoming administration.

Main Challenges

Social protection programs expanded over the past two decades, as more inclusive social policies were pursued in the context of greater fiscal space. Over the past two decades conditional cash transfer (CCT) programs have been consolidated; health insurance coverage and pension coverage for the elderly has increased; young people in particular have used labor market programs; and integrated service delivery mechanisms have been developed to more accurately identify target households and deliver benefits more efficiently. Contributory social security schemes offer pensions, health insurance, and other benefits to those who pay into the system. A range of non-contributory interventions, including a near universal health subsidy scheme for the poor (fee waivers)[4], are designed to reduce poverty and promote human capital development for those who are unable to contribute.[5] Public and mandatory private social expenditure[6] in Colombia was 12 percent of GDP in 2011, significantly lower than the OECD average of 22 percent (Figures 5.1, 5.2 and 5.3).[7]

Figure 5.1 Expenditure on social protection



Source: ASPIRE database (June 2017).

3 Areas such as the border and large urban centers like Bogota, Medellin, Barranquilla, Cali, Bucaramanga and Santa Marta. Migración Colombia (2018).

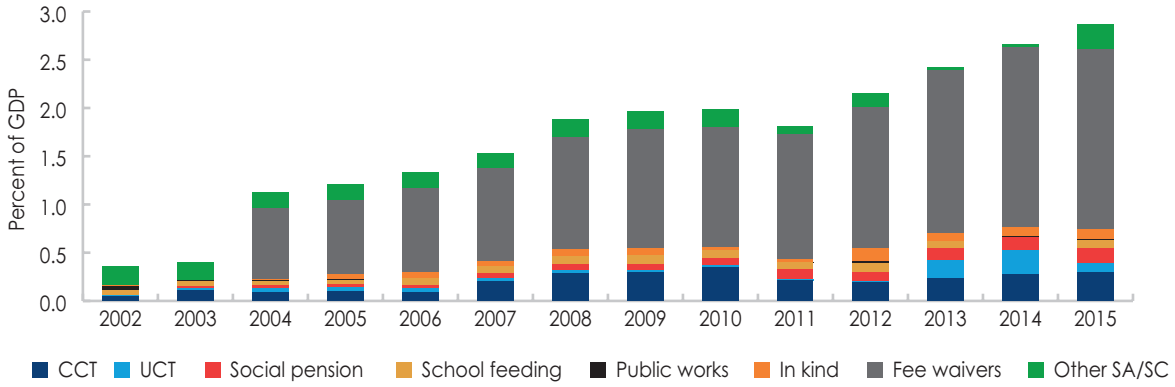
4 Colombia has also achieved near universal health insurance coverage (98 percent of the population) and guaranteed a single benefit package to all users, eliminating inequity in coverage and poverty-inducing expenses.

5 Among these a few stand out. The conditional cash transfers program, *Más Familias en Acción* (MFA), launched in 2001 and covering over 2.5 million families, was among the first wave of CCT programs globally and is well regarded for its impacts on health, nutrition and education. The youth training support program *Jóvenes en Acción* (JA) covers more than 350,000 poor beneficiaries providing them with conditional cash transfers to facilitate access to post-secondary training opportunities. The non-contributory pension benefits program *Colombia Mayor*, with 1.3 million beneficiaries, has significantly expanded pension coverage since it was first implemented in 2008. These programs are complemented by labor market interventions that promote employability (mostly through SENA) and by many smaller inclusion interventions in rural and urban areas.

6 Using the OECD's Social Expenditure Database (SOCX) definition of social spending. The Colombian government follows a different classification of social expenditure than that used by the OECD SOCX. In Colombia, public social spending is divided into the following categories: "work and social security" (including programs for the elderly, survivors, disabled people, families, active labor market programs, unemployment and other social policy areas, especially, social assistance), education, health, water, housing and culture. The World Bank ASPIRE database, whose data is shown in figures 5.1, 5.2 and 5.3 – includes categories under "work and social security." It is important to mention that spending on social assistance shown in Figure 5.2 has grown significantly but from a very low base. As noted in Policy Note #1 on Fiscal Policy, this spending is mostly well-targeted and still small in size, while spending on pensions is large and regressive in nature.

7 OECD (2016). Among OECD countries only Korea and Mexico spend less as a proportion of GDP.

Figure 5.2 Expenditure on social assistance



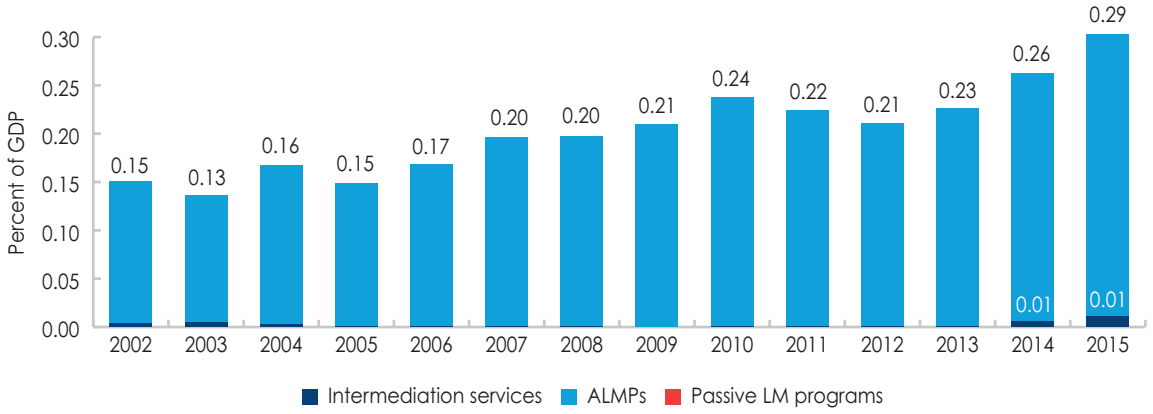
Source: ASPIRE database (June 2017).

The social protection system remains fragmented and often lacks the information to identify gaps and overlaps in demand and supply for social services. Despite having a comprehensive social protection system to support the needs of poor and vulnerable, fragmentation of programs and information result in potential targeting inefficiencies, weak coordination, and limited capacity to guarantee long-term results. In 2015, there were almost 60 active social assistance, social insurance, social care and labor market programs, managed by at least 15 institutions.[8] At the local level an unknown number of social programs are operating, funded by subnational governments (departments and municipalities) and sometimes by the non-profit and private sectors. There is no way of identifying duplications or gaps in social services and benefits at the individual and household levels. In addition, individual programs face implementation challenges that can reduce their efficiency, prevent effective coordination, and limit their impact. For example, most programs have not established effective mechanisms for program exit or for encouraging harmonization with complementary programs, limiting the potential to support participants' mobility across programs, or to reach a larger number of potential users over time.

The social registry – Sisbén – faces significant challenges in maintaining up-to-date information used by key social programs to identify and select potential beneficiaries. Sisbén (*Sistema de Identificación de Potenciales Beneficiarios de programas sociales*) is currently used to target 20 social programs provided by 10 different government entities, as well as some local level social programs.[9] Although its current iteration, Sisbén III, is a solid and well-functioning instrument, the low frequency with which regular updating mechanisms are used implies gradual loss of quality and reliability of information over time (Box 5.1). As a result, information on demand for social programs is outdated, making it hard to target programs effectively, leading to further inefficiency.[10]

8 World Bank, ASPIRE database (2017).
9 CONPES 3877 (2016).
10 In addition, the algorithm used by Sisben III does not adequately capture households' ability to generate income, leading to possible targeting inaccuracies for those social programs for which income is a key criterion. CONPES 3877, p.18 (2016).

Figure 5.3 Expenditure on labor market programs



Source: ASPIRE database (June 2017).

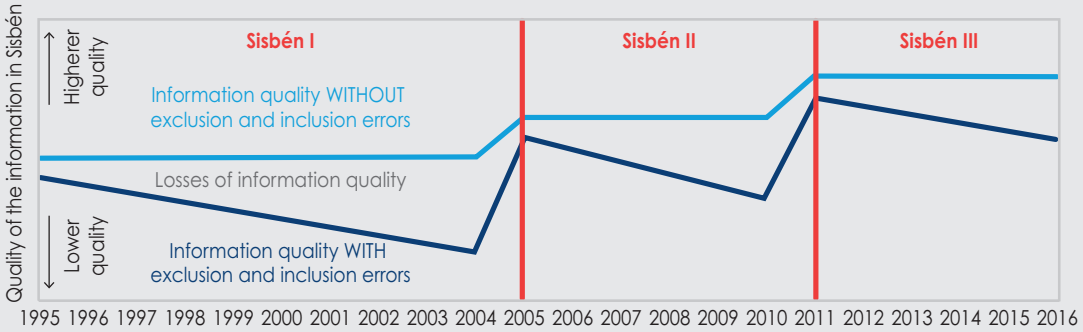
Currently, there are limited incentives for users to maintain updated information, and a potential burden associated with doing so. A user that updates an ID document, household composition or address, needs to inform each program in which he is enrolled separately, this information is not automatically shared by Sisbén programs, suggesting that further steps would be required to update socioeconomic information to determine eligibility. In addition, the incentive to complete this step is limited if there is a perceived risk of losing access to current benefits. While new applications to Sisbén are open and people can reach local authorities to update their information, there are no incentives to do so when household conditions are improving, because of the perception that it will threaten eligibility. The roll-out of Sisbén IV, and the implementation of its social contract, as described in the CONPES document 3877, presents an opportunity for specific measures to be taken in coordination with other agencies and subnational governments to improve the quality of information while simplifying the burden on the user.

Asymmetric information, coverage gaps and conflicting eligibility requirements, represent significant barriers to effective access, limiting participants' ability to apply to programs in a timely manner. Coverage to eligible families is guaranteed for programs like subsidized health insurance, but productive inclusion programs like *Mi Negocio*, IRACA, and *Familias en su tierra*, tend to have small, uneven coverage across departments/municipalities. Even large programs like the CCT *Más Familias en Acción* have not been able to accept the large inflows of eligible beneficiaries in the last two years due to fiscal constraints. Eligibility and documentation requirements vary, so poor households have to comply with many different requirements to access a package of services (age, income level, educational attainment, among others). The productive inclusion program, Mi Negocio, provides business development services for the poor, but limits its target population to those currently registered in Red UNIDOS (social intermediation services for the extreme poor) or to victims of conflict (*Registro Único de Víctimas*).

While Colombia has provided support to families in the process of "linking up" to social programs for a long time, access remains challenging. In 2006, Colombia was one of the first countries to model the successful *Chile Solidario* program by creating the *Red Juntos* (now

Box 5.1 Theoretical losses of Sisbén's information quality over time, 1995–2016

Sisbén's information quality degrades over time as each new version is introduced, generating high costs of inefficiency and administration. Even if each of the three versions of Sisbén has improved information quality, information on individuals' living standards collected from surveys before the implementation becomes obsolete over the years. Conpes 3877 of December 2016, estimates that as of October 2016, as many as 74 percent of people registered in Sisbén III had outdated information. These losses of information quality represent inefficiency of public spending – some non-poor people benefit from anti-poverty programs and some poor people are excluded. Using monetary poverty measures, Conpes 3877 estimated that as many as 65 percent of people were mistakenly identified as poor in 2015 (inclusion errors) and 17 percent were mistakenly excluded (exclusion errors). Multidimensional poverty measures show that the inclusion error was 50 percent and the exclusion error was 29 percent. In addition to these errors, the current process requires costly surveys to be run periodically at national level to collect household data for the system.



Red UNIDOS), a social intermediation strategy to help the extreme poor access social programs.[11] *UNIDOS* can help overcome information gaps and connect the poorest people to available supply, but – by design – it is directed only to the extreme poor, which comprise a small fraction of the potential users of social programs. Other recent attempts to increase access for the poor include fostering synergies between Sisbén and programs at the local level. Some Sisbén municipal offices with high resources and strong technical capacity serve as point of registration and as the entry point for citizens looking for information, guidance, and referral to access new or retain existing benefits or services. Despite these efforts, potential beneficiaries in many municipalities still need to make multiple, possibly lengthy, trips to the program office. They need to get information from multiple sources, and make use of their social network to gather the information they need to apply effectively, and separately, to each program.

Program supply is not harmonized, and individual programs face design and implementa-

11 In December 2015, the National Agency for Reduction of Extreme Poverty (*Agencia Nacional para la Superación de la Pobreza Extrema,* ANSPE) formerly responsible for the implementation of the *Red Unidos* was merged into *Prosperidad Social* to support coordination of social programs.

tion challenges that limit their effectiveness and the efficiency of the system. The MFA conditional cash transfer plays an effective safety net role for the poor but, has limited mechanisms for program exit or to establish linkages with complementary interventions, effectively limiting its effectiveness in supporting participants' mobility. *Jóvenes en Acción*, on the other hand, has demonstrated results on improving access to higher education, reducing dropout rates and providing better opportunities to disadvantaged youth in the labor market[12] but it also faces design challenges (e.g. limitations to track employability outcomes) and budget space challenges that limit its coverage and reduce its potential to serve as a key complement to safety net programs. Similarly, several relatively small productive inclusion programs targeting rural and urban households have limited capacities to exploit synergies with complementary interventions. It is usually not possible to take advantage of synergies between programs, or shared eligibility requirements, to facilitate transition of users across programs in an organized enough way that supports effective delivery of services and achievement of specific household goals. Even when eligibility requirements are shared across programs in the same institution, potential users need to go through entirely separate application processes to demonstrate eligibility. *Prosperidad Social* has recently developed an integrated beneficiary registry (*Llave Maestra*) with the aim of supporting selection of potential beneficiaries by individual programs, coordination and tracking of benefits received.[13] Its potential is promising, but the *Llave Maestra* currently uses largely manual processes to draw information from program-level administrative data, and faces challenges from the quality of the underlying data.

Given the scenario just described, a "typical"[14] household faces challenges when trying to access the right program/benefit among the set of existing social security, social assistance, and labor-market programs. For illustrative purposes we refer to the example of Juan and Adela (Box 5.2). While this is representative of an "average" poor household, this example does not capture the diversity of contexts and situations of those who interact daily with the social protection system. Firstly, the social protection system is not only designed to reduce poverty, but also to prevent vulnerable people from falling into poverty, promote their social mobility, and facilitate the consolidation of the middle-class. In addition, it also focuses on especially vulnerable populations such as indigenous and Afro-Colombian peoples, internally displaced populations, victims and former combatants. The experience of accessing the system varies across these groups, and is likely to present unique challenges (or opportunities).

First, Juan and Adela would need to make sure that their socioeconomic information is up to date. Since their Sisbén information was last collected in 2009 several things have changed for them: their youngest son was born; Adela's mother has moved in with them; and Adela no longer works as many hours as she used to. More than 20 programs use Sisbén. Juan and

12 Econometria and SEI (2017).

13 The *Llave Maestra* contains information on over 19 (past and current) programs implemented by the Social Inclusion and Reconciliation sector, including currently active ones such as Más Familias en Acción, Jóvenes en Acción, Familias en su Tierra, Mi Negocio, Infraestructura y Hábitat, IRACA, Red de Seguridad Alimentaria, UNIDOS, Unidad de Víctimas.

14 The "typical" poor household profile is based on 2016 GEIH data, using a monetary poverty measure. The profile includes several dimensions considered relevant to characterize the household in terms of their basic human capital endowments, assets and available resources. For each dimension/variable, we choose the most frequent outcome, with only a few exceptions. In the case of urban and rural poverty, for example, most of the poor live in urban areas but poverty rate is higher in rural areas.

Box 5.2 Family story, for illustrative purpose

The Rodriguez family is a family of four, with two children ages 4 and 13. The family lives in a rural area. The head of household, Juan, is a 46-year-old agricultural worker, who has completed basic primary education. His work is seasonal, and Juan goes through stretches of unemployment of variable duration. During those times, he looks for jobs through his network. He has considered taking some training, but has a hard time fulfilling basic requirements and accessing training opportunities. His wife, Adela (37), has completed secondary school, and runs a small food service business from home. The business has been expanding slowly, and is successful, but to expand it further she would need to access credit, and she does not know where to start. Rosa, Adela's 70-year-old mother who is no longer able to afford living on her own, has recently moved in with them. She is helping with child rearing, but also requires help from Adela for her own basic care.

So, how can the existing social protection system support them and their needs? What is it like for them to access the social protection system? What kind of barriers or challenges are they most likely to encounter in the process?

Adela's information needs to reflect their current situation if they wish to prove eligibility for one or more of these programs.

Second, they would need to navigate the system's multiple entry points, access windows, and information requirements. They would need to identify whether they are eligible for the programs they are interested in, verify whether the program is available in their area, and navigate the different program rules regarding enrollment windows and additional eligibility requirements.

Even after having successfully accessed the system, they would have to repeat this process – or part of it – to access different services or benefits over time, depending on their changing needs. Program supply is not harmonized and no or few mechanisms exist to facilitate access across programs that could be complementary. For example, if their children were to successfully complete secondary school with support from *Más Familias en Acción*, there would be no guarantee that enrollment in complementary, follow-on programs such as *Jóvenes en Acción* would be automatic or supported. Scholarship programs like *Ser Pilo Paga*, have a completely different enrolment window, with different physical and virtual channels to access the benefits. Similarly, Juan and Adela would not be able to access *Mi Negocio* even if its geographic targeting includes the municipality where they live, because it is only available to those already included in the UNIDOS or victim's registries, of which they are not part. Rosa, Adela's mother may not be able to access the social pension *Colombia Mayor* even though she is eligible. While the program accepts new applicants/registrations, it faces a limited budget that does not allow it to increase the number of actual beneficiaries.

Finally, as their socioeconomic information changes, they will have to update their information in each of the programs in which they are enrolled in Sisbén. It is their responsibility to provide all programs and services with their new address, family composition information, and other information.

Policy Options

Shift towards a citizen-centered service delivery system

The social protection sector needs to transition from a static, fragmented set of social programs to a dynamic and integrated system that ensures that people receive the right program (and the right amount) at the right time. The final objective is to make it possible for the Rodriguez family and others like them to move more easily within the system as needed. The government should focus on designing innovative mechanisms and strengthening management tools that can deliver well-sequenced, more effective combinations of programs (or "integrated packages") that address the different challenges faced by individuals and households, while also simplifying the process for the user.

Delivering services to citizens effectively is critical for creating trust and shaping perceptions of the public sector.[15] Transforming service delivery begins with understanding citizens' needs and priorities, and many governments face challenges related to citizen satisfaction and declining trust. This may be due to various internal and external circumstances, but improvements in service delivery can play a role in shaping perceptions and building trust in the public sector. In designing public service delivery programs, governments tend to map processes which reflect their own institutional requirements and assumptions about users, instead of the actual needs of the end users. Even when user feedback is requested, it is rare that it leads to direct change in implementation or delivery. This is particularly acute in social sectors, where the client-provider power relationship is more asymmetrical.

Shifting towards a citizen-centered service delivery system could positively impact delivery performance, final outcomes and user satisfaction. Since the first wave of expansion of the social protection system in the early 2000s, many reforms have been made to the institutional arrangements of the sector, seeking to enhance the coordination of social policies and programs. People do not experience policies,[16] they engage with service providers and come to know and perceive the State's value through them. Re-imagining public service delivery from the point of view of the users can help generate solutions that create value for users, and improve efficiency of the system. Especially in the provision of social programs and services, where those in charge of designing the service are generally removed from the realities of their potential users, understanding who the users are, what they need, how they make decisions and what their habits and expectations are can make the difference. In a dynamic social protection system, users are the focus of services and programs (Box 5.3), and management tools help achieve better outcomes, for example by providing them with access to and exit from individual programs.

The experience of the Rodriguez family and the processes described above highlight two areas

15 Heintzman and Marson (2005). As summarized by the authors a thorough review by Bouckaert et al. of existing theories regarding the factors that explain variations in citizen confidence and trust in public institutions identified two main strands. The first group of theories seeks to explain declines in confidence primarily based on societal changes in identities and values. The second group of theories focuses instead on the role of governments' performance, and citizens' perception of such performance, in shaping trust and confidence. Heintzman and Marson focus on the latter strand, and particularly on the administrative/service delivery level micro-performance of government as an important approach to improving citizen trust and confidence.

16 OECD Observatory – Public Sector Innovation. https://www.oecd.org/governance/observatory-public-sector-innovation/blog/page/human-centereddesignandpublicsectorinnovation.htm

Box 5.3 What is citizen-centered service delivery? Canada - Citizen First studies

The government of Canada has a long history of focusing on public management improvements. The citizen-centered service research agenda made a significant leap in the late 90s early 2000s with the acknowledgement that a lot of research until then had not been actionable. As a result, they launched the "action-research" initiatives, including the now famous Citizen First Surveys, designed to track service delivery from the client ("outside-in") perspective. The surveys provided new insight into the challenges faced by citizens when accessing services, something that had largely gone unnoticed because of the previous focus on their experience once they had reached the point of service. The Citizen First study highlighted that 16 percent of the time citizens needed to access multiple services at once, often spread across agencies and levels of government, the burden of navigating the system fell entirely on citizen. Three main drivers of citizen satisfaction with access were identified: (i) knowing where to start and how to get service, (ii) easily find out information, (iii) ability to contact staff. This and other findings have driven changes in service design that have led to improvements in performance and citizen satisfaction. Citizen First surveys are now carried out every two years. The Common Measurement Tool, a multi-channel instrument with core questions to allow programs to benchmark their results against others, is another important element of this agenda.

for the new administration's reform agenda, which could support the required shift towards a citizen-centered service delivery system.

First, the quality of demand side information will need to be improved: an integrated social registry with up-to-date information will be key to maintain the efficiency and effectiveness gains in the determination of eligibility made with the roll-out of Sisbén IV. The approval of CONPES 3877 on Sisbén enables it to maintain updated information regarding the evolving needs of social programs, and this information will allow for estimations of monetary and multidimensional household poverty;[17] it will align Sisbén IV with official poverty measures and targeting criteria of many existing social programs. Moreover, the changes in the way the information of Sisbén IV is managed at the municipal level, its progressive integration with existing social information systems as well as other administrative data managed by different agencies, and the implementation of a "social contract" with potential users setting clear rules and responsibilities to periodically update information for program eligibility purposes, offer a significant window of opportunity to shift the status quo and create a more integrated social information system that serves as the channel for dynamic inclusion.[18] These planned changes pose a significant shift in the way data is shared between Sisbén and other agencies, as well as in the processes within Sisbén and will thus require strengthening Sisbén's technical resources and processes. If successfully implemented, they will help prevent the gradual loss

17 The Sisbén IV questionnaire includes new questions on household monthly expenditures, factors associated with disaster risk, effective access to health services, care of children under 5 in the household, and labor and non-labor income of household members.

18 The social contract seeks to encourage citizens to continuously update their socio-economic information, thus improving the allocation of services and benefits. To promote more frequent updates by beneficiaries, Conpes explicitly calls upon social programs to establish clear duration and entry/exit requirements.

of quality of information over time and can reduce the need for survey-sweep efforts to collect updated data, that Sisbén has used since it was first introduced in 1995, reducing cost over time while increasing quality of the data. It will also help track program beneficiaries' situation over time. Sisbén will be more dynamic, and better able to direct supply to where it is needed. International experience such as the implementation of Chile's RSH and Turkey's ISAS, as well as Brazil's *Cadastro Único* among others, can offer valuable lessons learned.[19]

Second, improve the effectiveness and coordination of social protection programs. A combination of programs, or "integrated packages" should be used to address individual and household needs over the life cycle. These are designed "around" a user need or life-event and, because of this, tend to be more effective than individual programs.[20] For an integrated package to work, programs need to be able to work together, and must be designed consequently. For example, entry/exit criteria may need to be harmonized, or referral protocols across programs introduced. Existing management and coordination tools have not been used to their full potential in terms of informing decision-making, either at the higher policy level or at program level; for example, information management tools like social registries (Sisbén) and/or integrated beneficiary registries (the *Llave Maestra*) could facilitate linkages across programs. They could help identify gaps in program coverage and reveal program overlaps; used systematically to inform program-level decisions, they could also help direct users to the most appropriate programs and services.

A citizen-centered design approach could maximize the impact of these changes. The outside-in view of service delivery (Box 5.3) starts with a need and an expectation of the user, not the service itself. A citizen-centered approach can guide the choice of tools used to (i) identify citizens' service needs and expectations, (ii) systematically integrate findings to improve accessibility, convenience and efficiency and (iii) measure and benchmark results in client satisfaction. Citizen-centered design makes use of data analytics, design thinking, behavioral insights, and organization development to re-design social service delivery and improve user experience. Solutions tied to front-office functions (physical spaces, customer service, citizen feedback) are as important as those related to integrating back-end functions such as data sharing, interoperability, shared application processes, and monitoring. Colombia is not new to these ideas[21] and national and subnational government initiatives are already underway to respond more effectively to citizen's needs (Box 5.4). Focusing on users in the design and delivery of social protection programs and services can identify problems with the system; develop solutions; and help increase trust in government.

19 Leite et al (2017).

20 While it is hard to provide quantitative evidence of how providing combinations of programs can be more effective in supporting individual households' needs, the literature does provide some evidence of the gains for poverty reduction when providing joint interventions compared to separate interventions. Chong et al. (2007) show that households in Peru who received two or more public services jointly, e.g., such as water, electricity, sanitation or telephone increased their welfare more than when services were provided separately, especially in urban areas. Maldonado et al (2006), Banerjee et al (2015) and Blattman et al. (2016) show positive synergies with social protection programs and productive interventions, when provided together.

21 CONPES 3785 (2013) "*Política Nacional de Eficiencia Administrativa al Servicio del Ciudadano*", sets out a proposal for an *Efficient Public Management Model for Citizen*, aimed at improving the quality of management and the provision of services by the Public Administration. The model includes actions to implement 'internal and external' service windows to increase coverage and quality of services. And also, introduces institutional arrangements that promote coordination among public institutions. The proposed model also defines principles from Decree 2482 of 2012 regarding transparency, citizen participation and efficiency.

Box 5.4 Experiences with citizen-centered service provision for social programs in Colombia

- Ferias de Servicios al ciudadano (https://www.dnp.gov.co/programa-nacional-del-servicio-al-ciudadano/Paginas/Ferias-Nacionales-de-Servicio-al-Ciudadano.aspx).
- Centros Integrados de Servicios – CIS: https://www.dnp.gov.co/programa-nacional-del-servicio-al-ciudadano/Paginas/Centros-Integrados-de-Servicios-–-CIS.aspx
- Operación de las oficinas municipales del Sisbén en Cali
- Protocolos de Servicio de Atención al ciudadano Distrito de Bogotá http://secretariageneral.gov.co/transparencia/informacion-interes/publicacion/otras-publicaciones/manual-servicio-la-ciudadan%C3%ADa

Annex 5.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Improve the quality of demand-side information for social protection programs	• Conduct a new round of *Sisbén* data collection • Implement mechanisms (and supporting operational processes) for continuous update of *Sisbén* data through: (i) user provided (self-reported) information; and (ii) administrative data exchange (interoperability) • Implement social contract with potential users of social programs/services and introduce citizen-centered principles for interface with users	• Consolidate a dynamic social registry through interoperability of administrative data and social contract for self-reported data. • Improve use of *Sisbén* data and information by social programs for targeting (beyond score, use socioeconomic characteristics captured by *Sisbén*, as relevant) • Strengthen the role of municipalities as the key citizen-government interface while maintaining policy and guideline setting role of the central government; and consolidate citizen-centered principles for interface of Sisbén with users
2. Improve the effectiveness and coordination of social protection programs	• Review individual program design; focus on alignment of incentives, opportunities for harmonization, and complementarity; Introduce citizen-centered principles for interface with users • Strengthen cross-sectorial coordination arrangements to facilitate data exchanges for decision making and improved service delivery (e.g. with *Sisbén*) • Strengthen the use of *Llave Maestra* to support: (i) referral of potential users to complementary services; and (ii) monitoring	• Design packages of services centered on families' needs and profile and supported by referral protocols and agreements across programs • Implement data exchange from programs back to *Sisbén* for data analysis and service delivery purposes • Introduce protocols to facilitate automatic referrals to complementary programs or eligibility status (not enrollment) for users of programs with same eligibility requirements, to avoid duplicating processes • Promote capacity building at the municipal level for integrated delivery of social protection programs and services while maintaining policy and guideline setting role of the central government.

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CENTRO DE SALUD LA PEDRERA

NOTE 6

HEALTH

Despite major achievements in insurance coverage and financial protection to its citizens, Colombia's General System of Social Security in Health (Sistema General de Seguridad Social en Salud, SGSSS) faces important challenges related to financial sustainability, quality of care and health outcomes.

The growing expenditures that could threaten the financial stability of the system is the most pressing of these challenges. Policy interventions aimed at improving the system's efficiency and financial design are required. No single intervention would be able to address the complexity and diversity of issues affecting the system's sustainability: new sources of financing and changes to payment mechanisms need to be introduced, and regulatory and supervisory capacity need to be strengthened.

Access and quality-related issues have led to lower than desirable progress in health outcomes. The challenges related to access and quality-related issues arise, to a large extent, from the suboptimal application of results-based models of care, which has hindered the translation of insurance coverage into better access to services, particularly in the rural and remote areas of the country. As a result, improvements in main health outcomes have been similar to, or lower than, the rest of the region, and significantly lower than the OECD average. The implementation of a system focused on outcomes requires, among other measures, a new strategy to improve the quality, allocation and development of the sector's human resources, in a way that is compatible with the country's need to fully release the new integrated model of care (MIAS). A new policy that can support the appropriate functioning of public hospitals is also necessary to the address the challenges of reaching those citizens that live in the more remote areas of the country and whose access to care largely depend on these providers.

The fact that health is defined as a fundamental human right in the country's Constitution represents an additional and permanent challenge to the organization of the system and how it responds to the expectations of its key stakeholders. In this sense, Colombia needs to find an adequate and sustainable way to operationalize the concept of the right to health. A Statutory Law was approved in 2015 with such a goal, as it attempts to address some issues derived from

a liberal interpretation of the constitutional right to health by different stakeholders that have contributed to the exponential growth of judicial claims. While the impact of the Statutory Law is difficult to assess, the very tangible issues that affect the Colombian health system have been translated into a general perception of discontent and low confidence in the system that may threaten the progress that has been achieved. In this sense, it is critical that a channel of dialogue with the judicial sector and other stakeholders be established and clear information is provided for these decision-makers to promote collaborative solutions that can help address the differences and tensions that exist between the various actors in the system.

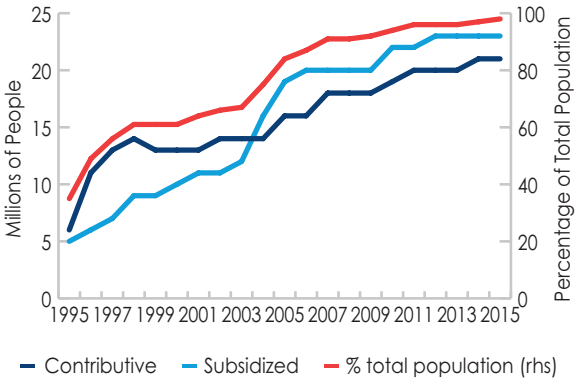
Context And Reform Progress

The SGSSS is regarded as one of the country's major social achievements of the recent past. Since the approval of Law 100 in 1993, the country has achieved universal health coverage: in 2017, 46.7 million Colombians, or roughly 98 percent of the population, were enrolled in the SGSSS's two systems. The contribution-based system, for those in formal employment and the non-poor (approximately 48 percent of the affiliated population); and the subsidized system for the poor (52 percent). These advances have demanded considerable political and financial commitments from the country since the 1993 health reform.

There has been important progress in health outcomes in recent years. Chronic malnutrition, adolescent pregnancy and vaccination coverage have shown improvements. Chronic malnutrition decreased from 13.2 percent to 10.8 percent between 2010 and 2015. Adolescent pregnancies returned to their lowest level since 1990 (17.4 percent), after reaching 19.5 percent in 2010. The coverage of the biological vaccine that prevents diphtheria, pertussis, tetanus, hepatitis B and influenza B has reached 91 percent, while coverage of the triple viral vaccine (measles, mumps and rubella) reached 92 percent. Colombia now has one of the most comprehensive vaccination programs in Latin America.

The overall financing structure of the SGSSS is progressive[1] and provides a significant level of financial protection to its beneficiaries. Out of pocket expenditure is one of the lowest in the region: in 2014 (the last year for which data is available), it was estimated to be 15.4 percent of total health expenditure, up from an estimated 43.7 percent in 1993 and only slightly above the observed OECD average.[2] A significant increase in the tobacco tax rate[3] and an increase in the general value added tax (VAT) from 16 percent to 19 percent effective were

Figure 6.1 SGSSS Coverage by type of program



Source: Ministry of Health, Financing Division.

1 Amaya-Lara (2016); Guerrero et al (2015); Florez et al, Knaul et al. (2012).
2 Baron (2007).
3 A 200 percent increase by 2019, with 100 percent in 2017 and the remainder in 2018, followed by real annual increases of 4 percentage points after that.

approved by Congress in late 2016. It is estimated that this reform will bring an additional COP 500 billion to the health sector and prevent 2,300 deaths per year.

Main Challenges

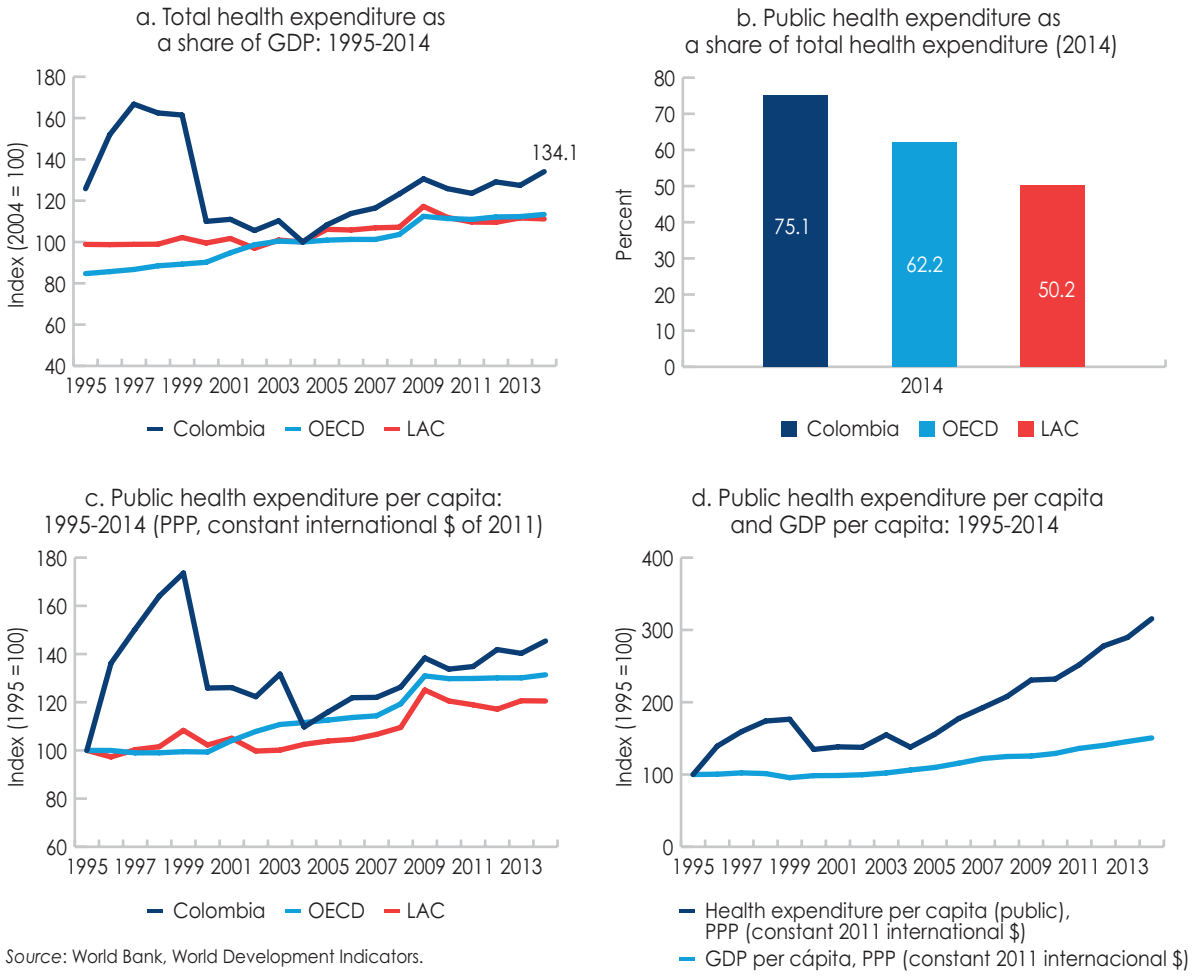
Improve the efficiency and financial design to ensure SGSSS's financial sustainability

Financial sustainability is the most pressing issue facing the SGSSS, and the gains achieved in coverage and financial protection are at risk unless the issue is prioritized and properly addressed. Total healthcare spending, and particularly public expenditure, has been growing rapidly in recent years. Even though total health expenditure, at 7.2 percent of GDP, is significantly lower than the OECD average of 12.3 percent of GDP, and similar to the level observed in the Latin American region (7.1 percent of GDP), it grew rapidly after the crisis of the late 1990s and early 2000s[4]: it was 34 percent higher in 2014 than in 2004 (Figure 6.2 a).[5] Most importantly for the financial sustainability of the system, (i) *public expenditure* on health as a share of total health expenditure is higher than the average of Colombia's main comparators (75 percent for Colombia, 62 percent in the OECD, 50 percent in LAC. Figure 6.2 b)[6] and is projected to increase; and (ii) per capita public health expenditure growth (constant international PPP dollars of 2011), exceeds the average increases in the two comparator groups (Figure 6.2 c), as well as per capita income growth (at PPP) (Figure 6.2 d).The government has tried to help alleviate this issue by injecting additional resources into the pool of health resources, e.g. the surplus from the Regional Pension Fund (FONPET), general taxes (part of VAT) and earmarked taxes (e.g. tobacco and alcohol). The SGSSS deficit for 2017 was estimated to be COP 1.6 trillion[7]; the total liabilities reported by the public providers association (ACESI) are COP 3.38 trillion (for debts older than 1 year), while debt is estimated at COP 14 trillion, half of it from public providers. The government is proposing a change in the distribution of the health resources from the General System of Participations (*Sistema General de Participaciones, SGP*),[8] increasing the proportion allocated to the financing of the subsidized regime from 80 percent to 90 percent and has also implemented administrative measures to reduce the proportion of hospitals at high risk of bankruptcy. However, these measures are not enough to fix the structural imbalance of the system and the deficit is projected to widen in the coming years.

The expansion in coverage to reach poorer people, and harmonization of the benefits across the subsidized and contributions-based systems has changed the nature of the financing of the sector in recent years. In 2010, Colombia's SGSSS was still mostly financed by payroll taxes (*parafiscales*) (70 percent), but by 2016 general revenue and payroll taxes were contributing equally to its financing (Figure 6.3 a). This has important implications for overall medium-term fiscal sustainability: in 2017 the system presented a deficit for the first time and government projections indicate continued deficit growth in the coming years (see Figure 6.3 b). This deficit is covered by government budget transfers at least in the short term, as other options, such as raising contribution rates, are politically difficult in the current context.[9]

4 Total health spending dropped from a peak of 9 percent of GDP in 1997 to 5.4 percent in 2004.
5 Comparative data are available for the 1995-2014 period.
6 2014 data.
7 PROESA (2017).
8 The SGP is constituted by the resources that the Nation transfers by legal mandate to the territorial entities (departments, districts and municipalities), for the financing of the services under their charge, including health.
9 An increase in contribution rates would raise the cost of labor and could thus create a disincentive to formalization.

Figure 6.2 Health expenditure



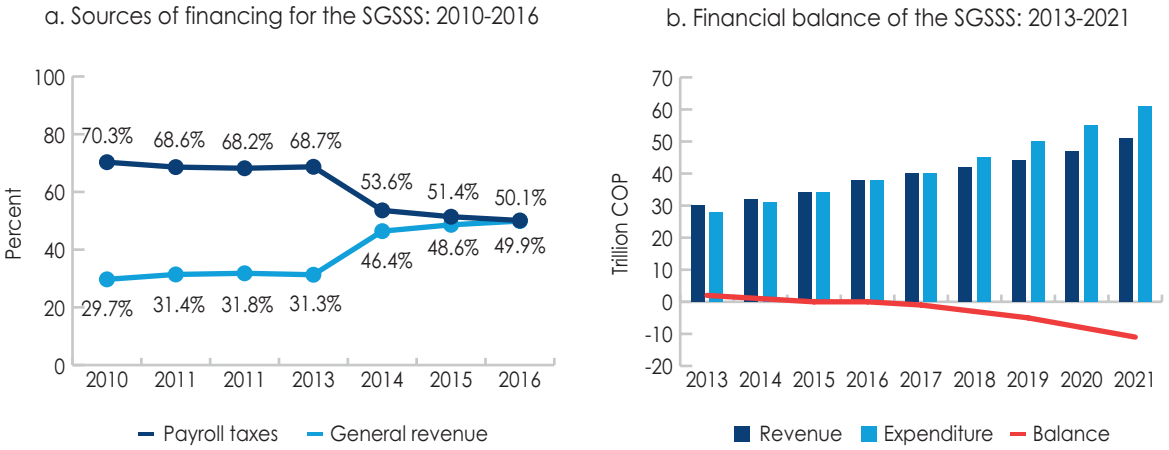
Source: World Bank, World Development Indicators.

The financial sustainability of the SGSSS also depends on demographic issues such as the epidemiological transition and the rapid population aging. The former shifts the burden of disease to more complex and expensive chronic diseases: non-communicable diseases, including mental illnesses, already represent 83 percent of the country's burden of disease. The latter can be seen from the changes in the dependency ratio, i.e. the proportion of people older than 64 to those of working age (15 to 64 years old). This ratio has increased substantially in the past 30 years, from 6.7 percent in 1985 to 10.7 percent in 2016, and at a much faster rate in the last ten years. Colombia's aging process is expected to materialize three times as fast as in high-income Europe, which means that there is less time to implement the necessary reforms.

Factors related to the labor market also affect the sustainability of the SGSSS. The slow pace of labor formalization impacts the balance of active contributors versus the number of beneficiaries in the subsidized regime, as shown in Figure 6.1.

Exploitation of the health system's regulatory weaknesses also represent a threat to its sus-

Figure 6.3 SGSSS financing projections



Source: Ministry of Health, Financing Division.

tainability. The reimbursement, through judicial claims, of high-cost inputs (mostly medications), services and procedures not included in the benefit plan (*plan obligatorio de salud* POS, until 2016) have escalated in the past ten years.[10] The rapid growth in judicial claims results in part from the perverse incentives that insurers and providers face to grant services that are paid on a higher reimbursement schedule outside the capitation rate (*unidad de pago por capitación*, UPC). Judicial claims have grown exponentially in the last decade: from COP 600 billion in 2007 to COP 2.5 trillion in 2016, i.e. around 10 percent of total expenditure.[11] The combination of the high "non-POS" reimbursement rates arising from litigations with the weak regulation of pharmaceuticals (until 2012 the prices of medicines paid by insurance companies were de-facto unregulated) has contributed to making the price of pharmaceuticals another important source of cost pressure. Lack of accountability, mismanagement or corruption compound these problems further.

Finally, the peace agreement and post-conflict context also impact the system's sustainability. New challenges to the system include the need to confront mental and psychosocial issues, and to design new organizational and delivery structures to better suit the rural areas where the populations most affected by the peace process are located.

Quality and access: the need for a system focused on outcomes

Health outcome gains have been lackluster and lag those of comparator countries. Improvements in the main health outcome indicators have generally been similar or lower than those seen in the region, and are significantly lower than the average for the OECD (Figures 6.4 a and 6.4 b). This is mainly due to the persistence of barriers to access that still affect a large segment of users, and to the incomplete and insufficient deployment of a results-based, patient-focused model of care. These factors,

10 Ministerio de Salud y Protección Social (2016).
11 Since these services were not included in the benefit plan, coverage was generally denied when requested. This denial produced an administrative barrier, which can be resolved through a third-part authorization or through litigation (the so-called "tutelas").

combined with slow quality improvements, have influenced public perception and could potentially undermine the legitimacy of the system. The results of household surveys show that between 2010 and 2016, there was a 10 percent decline in the number of people seeking institutional care when ill.[12]

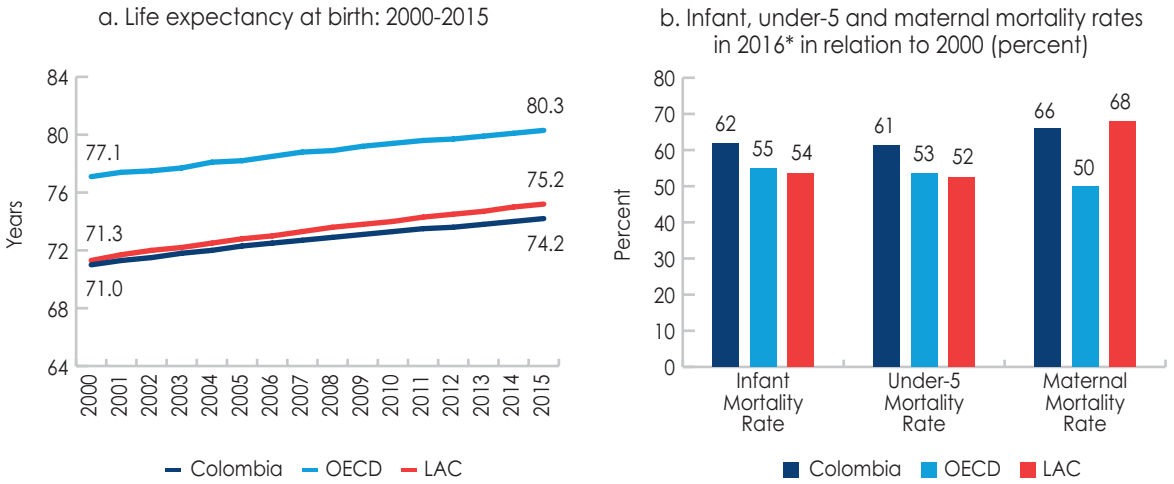
Geographic, financial and administrative barriers still impact access to healthcare services. Geographic and financial barriers mostly affect people in remote areas, where communication is difficult and mobilization is expensive. They are unattractive to private insurers and providers, and therefore not well-suited to Colombia's managed competition model. Public hospitals play an important role in the provision of health services in these areas. In this sense, remote and isolated parts of the country require different organizational and supply structures to address the needs of these populations more appropriately. This is becoming particularly evident in post-conflict areas, where the singular needs of local communities – e.g. those related to mental health issues and to the health needs of ex-combatants and displaced families – require a vertically integrated model of care that is unlikely to be fulfilled by non-public providers.[13] Administrative barriers that slow down or prevent the provision of health services have persisted since the early days of health reform. Processes such as premium compensation, service authorization, verification of rights, or difficulties in filing claims impede people's ability to change insurer (EPS) or regime. These barriers are exacerbated by limited communication between the beneficiary and the system's main actors: insurers, providers (IPSs) and the Ministry of Health (MoH).

While health sector policies and regulatory measures have been largely directed towards promoting coverage expansion, the insurance model has incentivized a service provision scheme to help with individual and more complex services and procedures. This model has incentivized rent-seeking behavior by agents, rather than the objective of providing healthcare. It also boosted the provision of curative care to the detriment of risk management services and prevention, thus retaining few attributes of primary health care (PHC). As a result, quality-related indicators, such as those related to hospital readmission rates[14] and there is little information on the problem in Colombia. The objective was to determine the frequency of 30-day all-cause hospital readmissions and associated factors. This was a retrospective analytical cohort study of 64,969 hospitalizations from January 2008 to January 2009 in 47 Colombian cities. 6,573 hospital readmissions, prevalence: 10.1% (men 10.9%, women 9.5%and avoidable hospitalizations[15], remain below optimum levels.

The increasing prevalence of chronic diseases requires a model of care to respond to the challenges faced by Colombia's epidemiological transition. Law 1438 of 2011 introduced a new integrated model of care (*modelo integral de atención en salud*, MIAS), based on PHC principles. However, despite its presence in the National Development Plan for 2014-2018[16], its implementation has been limited, both in scope

12 Results from Quality of Life surveys (Encuestas de Calidad de Vida) of 2010-2016.
13 This challenge was recognized by the government when it launched the National Rural Health Plan (*Plan Nacional de Salud Rural*), which aims to strengthen the infrastructure and the quality of the public network in rural areas and improve the suitability and relevance of service provision there. This came about as a result of the Peace Agreement with the FARC.
14 Caballero et al. (2016).
15 Guanais et al. (2012).
16 Departamento Nacional de Planeación (2015).

Figure 6.4 Health outcome indicators



Source: World Bank, World Development Indicators. *Infant mortality rate and under-5 mortality rate: 2016 data; maternal mortality rate: 2015 data.

and geographical reach. Several elements still potentially threaten full implementation of the Law, including the lack of adequate data to provide feedback on the effectiveness of alternative models of care and that support the introduction of appropriate incentives, as well as lack of PHC training for general practitioners, specialists and other professionals.[17]

Adequate and sustainable implementation of the right to health

The 2015 Health Statutory Law (Law 1751) "operationalizes" the concept of health as a fundamental human right, as defined in the country's Constitution. The Law introduces a new concept of health care that extends beyond the traditional explicit benefit plan: it dictates that technical and scientific criteria corroborated through a participatory process will be used to exclude services and technologies provided and financed by the SGSSS. It makes the benefit package implicit, rather than explicit, i.e. users are entitled to all services, except those that are excluded. The Law also introduces a broader framework for healthcare aimed at improving health outcomes and equity in access. Adequate implementation of this Law is challenging because of the potential risk of unsustainability derived from its inappropriate interpretation and application by sector agents and the public.[18] The implicit tension between the Statutory Law and the financial sustainability of the system requires that exclusion mechanisms are properly deployed.

The Statutory Law was designed to address some issues derived from a liberal interpretation of the constitutional right to health by different stakeholders. As already noted, many stakeholders have appealed to the judiciary system to claim access to health services and inputs (particularly medications). Judicial claims or *tutelas* arise under two main scenarios: (i) one in which a health good or service that should be provided by the health system

17 OECD (2016).
18 Londoño & Molano (2015).

is not offered or is denied, as a result of administrative barriers, mismanagement or financial difficulties of providers and/or insurers of insurers;[19] and (ii) when the user seeks an input or service that is not offered by the system.

The use of judicial claims has skyrocketed since 2000, particularly those related to health issues, making the judiciary system an important player in the health system. Since 2000, the total number of *tutelas* increased by 366 percent, from almost 132,000 to approximately 615,000 in 2015. In the same period, the number of judicial health claims increased by 509 percent: from roughly 25,000 to close to 151,000. It was estimated that in 2009 alone, judicial claims cost the Colombian health system US$ 300 million.[20] Even though non-POS related claims have significant monetary values, higher numbers of *tutelas* involve POS-related services and inputs. According to a study conducted by the Ombudsman's Office, approximately 64 percent of the health-related judicial actions filed in 2015 were to enforce the POS, and most of those were in the subsidized healthcare system[21], indicating higher levels of difficulty experienced by the poor in fulfilling their rights.

It is difficult to assess the likely impact of the Statutory Law, particularly its effect on the use of judicial mechanisms to access health inputs or services. Although a list of 44 technologies and services that met the exclusion criteria defined through a participatory process was prepared in 2017, the impact of these regulatory norms on the general trend of *tutelas* will take some time to manifest and the government will need to adopt complementary measures mandated by the Statutory Law, particularly those related to the expansion of technologies and procedures. In addition, the public sector must learn how to operate within a more transparent and participatory framework. Finally, rights-related issues emerging from the post-conflict context may present further challenges regarding the implementation of the Law.

Policy Options

Improve efficiency and financial design to ensure financial sustainability

Financial sustainability in the healthcare sector requires a full set of policy measures, as no single intervention would be able to address the complexity and diversity of issues. New sources of financing and changes to payment mechanisms need to be introduced, and regulatory and supervisory capacity needs to be strengthened.

Introduce new sources of financing. The healthcare system requires an increase in its financing to remain sustainable. Even though co-payments and other fees are used as per Law 100, their use is restricted by the Constitutional Court and their expansion is not recommended because of their potential negative impact on access. Raising payroll contributions would distort the labor market and does not seem to be a politically or economically viable alternative, at least in the short run. Introducing higher taxes on products with negative health impacts, such as foods with high fat and/or salt content or sugary beverages are potentially attractive alternatives, for their revenue generating capacity, as well as for their positive health and cost-saving impacts. A new tobacco tax increase is less feasible but not impossible. Evidence from the most recent increase in tobacco taxes shows positive results and the risks of an increase in contraband do

19 OECD (2016); Rodriguez Orrego (2014).
20 Cubillos-Turriago et al. (2012).
21 Defensoría del Pueblo (2016).

not seem to have materialized. This alleviates fears of implementing a more "aggressive" tax increase that would move the tobacco tax policy towards the average regional price of cigarettes.

Strengthen and expand the regulatory and supervision capacity of key stakeholders, in areas such as medications, financial management and information analysis. As a response to financial and access issues generated by the high levels of pharmaceutical expenditures, the Statutory Law made the Ministry of Health responsible for regulating pharmaceutical prices, through the Medicine Commission (CNPMDM). Improvements in price regulation measures recently implemented and the centralized price negotiation of medicines, together with the greater competition brought by a biosimilar policy, are generating important savings in the purchase of medicines. The following proposed measures would further strengthen the progress achieved: (i) development of an integrated pharmaceutical information system; (ii) enhancement of price monitoring and surveillance capacity; and (iii) improvement of technical, logistical and negotiation capacity for the centralized purchase and distribution of strategic and/or high-cost medications. Regarding financial management, ADRES (*Administradora de los Recursos del Sistema General de Seguridad Social en Salud*) is the new entity responsible for managing the financial resources of the SGSSS to ensure their appropriate flow and control. The proposed support for this entity could include: (i) technical assistance for the development of the appropriate regulatory measures that define and structure the mechanisms for controlling resources; (ii) cooperation for the development and implementation of the required information systems; and (iii) improvements to the technical capacity of IETS (*Instituto de Evaluación de Tecnologías en Salud)*, the entity responsible for health technology evaluations and the formulation of clinical practice guidelines. On supervision, the National Health Superintendence requires improved capacity, especially at the regional level, where the system is more vulnerable to malpractice. Interventions are required to: (i) complete the decentralization of the Superintendence in regional urban centers; (ii) fully deploy the risk-based supervision model and include agents that are not traditionally prioritized in the supervision practice (e.g. lottery companies, labor risk insurers, as these agents also manage resources used to finance the health sector); and (iii) redefine the legal scope for health supervision in regions to avoid replication of duties. Finally, SISPRO is the information system where millions of transactions related to health and social protection take place. These transactions are an important source of information that could be used to improve the quality of the services as well as the policy making process. New approaches such as big data, advanced analytics and machine learning could be used to better analyze health records. Examples of new measures that could be implemented include: (i) electronic medical records; (ii) drug utilization review; and (iii) electronic invoices. Experiences and lessons learned from places like Estonia, Scotland, Finland, Alberta, Canada and South Korea, could be used to help develop and implement specific developments for the Colombian model.

Design payment and regulatory measures aimed at refining the relationship between insurers and providers. The existing reimbursement mechanisms used by insurers (EPS) to reimburse providers (IPS) do not adequately reflect costs or risks and do not provide incentives for improved financial performance and/or health outcomes. The introduction of case-based prospective payment mechanisms, such as the Diagnostic Related Groups (DRGs), for most inpatient procedures would provide in-

centives to efficiency and bring risk-sharing principles between EPS and IPS. Payments to insurers who use the capitation rate and who use performance- or results-based incentives to prevent chronic diseases could strengthen the primary level of care and promote more integrated healthcare. Changes in reimbursement mechanisms could be complemented with regulatory measures to organize the vertical integration of insurers and providers. This would create opportunities for efficiency gains without negatively impacting competition; it would also help design effective mechanisms to account for liabilities between insurers and providers. On the other hand, a certification mechanism to ensure that EPS comply with minimal technical standards is required, given the pivotal role of the insurers in the SGSSS, and the many instances of complaints and closures of insurers in recent years.

Quality and access: towards a system focused on outcomes

Design and implement a human resources strategy for the health system. The quality of healthcare services provided to any population is fundamentally dependent on the quality and appropriate allocation of the sector's human resources, Colombia still lacks a strategic policy for its human resources for health, even though a national competence framework (*marco nacional de competencias*) is being developed. The sector also lacks the role and function of the various professionals and technical personnel. Potential areas for policy definition include: (i) strengthening the role and power of primary care physicians; (ii) expanding the roles and responsibilities of nurses and other professionals, such as pharmacists; (iii) strengthening incentive mechanisms to deploy physicians in rural areas; and (iv) defining a stable financing mechanism to co-finance the residency training of doctors.

Prioritize the implementation of the MIAS. The MIAS represents the potential for implementing a model of care based on PHC principles. The model should be implemented throughout the country and should focus on strengthening public health and health promotion, prevention and early detection of health problems, and health education for the public. Given the post-conflict context, special emphasis should be placed on the implementation of mental health policies and actions within MIAS.

Design and implement a specific policy for public hospitals. Public hospitals are a critical tool to addressing access challenges in rural and remote areas of the country. As they tend to operate in more complex contexts, they require updated policies that respond to such an environment and can contribute to the development of (i) technical standards for management, quality of provision and health outcomes monitoring; (ii) costing and human resource assessment based on population needs, especially in rural areas; (iii) adequate planning for infrastructure and equipment (including alternative financing sources); and (iv) better coordination with insurers for adequate risk management in health.

Adequate and sustainable implementation of the right to health

Establish a channel of dialogue with the judicial sector and other stakeholders and provide clear information for these decision-makers. Given the important role that judges play through the *tutelas* in defining the provision of services and spending, the MoH should establish a communication channel with the judicial sector. The World Bank Group's SaluDerecho Initiative (Collaborative Learning Initiative on the Right to Health and Universal Coverage), succeeded in establishing a safe and neutral space for multi-stakeholder dialogue in seve-

ral countries of the region, demonstrating how collaborative solutions can help deal with differences and tensions that exist between the various actors in the system, and how these solutions can become a foundation for innovative solutions. In addition, judges should keep up-to-date with data and information and receive training on evidence-based medicine.[22]

22 A capacity development program of this type was implemented with great success, with the support of the Salu-Derecho Initiative, for the Constitutional Court of Costa Rica.

Annex 6.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Improve efficiency and financial design of the health system to ensure financial sustainability	• Design payment and regulatory measures aimed at refining the relationship between insurers and providers	• Introduce new sources of financing • Strengthen and expand the regulatory and supervision capacity of key stakeholders, in areas such as medications, financial management and information analysis
2. Steer the SGSS towards a system focused on outcomes	• Prioritize the implementation of the MIAS	• Design and implement a human resources strategy for the health system • Design and implement a specific policy for public hospitals
3. Implement the right to health in an adequate and sustainable way	• Establish a channel of dialogue with the judicial sector and other stakeholders and provide clear information for these decision-makers	

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NOTE 7

FINANCING AND MANAGING SUBNATIONAL GOVERNMENTS

Colombia has made efforts to establish the basis of a fiscally sustainable intergovernmental framework but has yet to advance the institutional capacity of territorial governments to manage expenditure responsibilities and mobilize own-source revenue. Reform priorities to improve the intergovernmental framework include: (i) reviewing the delegation of expenditure responsibilities and only delegating functions to those municipalities with the capacity to carry them out, while increasing their autonomy to manage these services; (ii) enhancing the capacity of departments and municipalities to raise own-source revenues, by updating and modernizing the cadastral and land registries, and improving tax administration; (iii) adopting a single streamlined process to prepare and select processes across funding streams and reduce earmarking of capital transfers; and (iv) revising the transfer formula to strengthen equalization.

Context and Reform Progress

Colombia has made important efforts to establish the basis of a fiscally sustainable intergovernmental framework, but has yet to advance the capacity of territorial governments to deliver quality services. Reforms have sought to discourage excess spending and borrowing; provide for performance monitoring; and adopt bankruptcy procedures for subnational governments. Weak management capacity limits the impact of decentralized spending. Subnational governments account for a significant share of public spending, but improving the quality of public spending remains challenging for most territorial governments. Most municipalities lack the management capacity, systems, and data to properly manage, monitor, evaluate, and report on the use of resources affecting service delivery. The current assignment of expenditure responsibilities does not adequately consider the differences in capacity.

High vertical and horizontal imbalances continue to be challenging and negatively impact the quality of service delivery. Own-source revenue mobilization is relatively low compared with the OECD, and raises dependence on central transfers. There are also persistent differences in fiscal capacity and differences in the cost of service provision that are not adequately considered in the distribution of shared revenue. Most subnational revenue comes from the SGP (*Sistema General de Participaciones*), a general fund for allocating tax revenues, and the SGR (*Sistema General de Regalías*),

which allocates natural resource royalties that are earmarked for investment. The SGP system promotes equal distribution of resources but does not take account of the varying service provision cost or fiscal capacity across municipalities. In 2011, Congress approved a constitutional reform which distributed royalties more evenly across regions and introduced performance criteria, with distribution still favoring producing regions. There are concerns about the efficiency of the institutional framework for approval of regional investment projects, which is carried out by regional SGR management bodies (OCADs) and about the central government's ability to respond to demand and execute regional projects. The execution of SGR resources has consistently been slow and there is evidence of persistent variation in the quality of project design and investment atomization.

Main Challenges

Discrepancy between expenditure responsibilities assigned to municipalities and their capacity to manage decentralized functions

Poor planning and execution, procurement, internal controls, and human resource management undermine expenditure efficiency. The progress made by the central government in reforming its financial management system has not extended to subnational governments (SNGs). Cash management is poor and payments to service providers are often delayed, impacting service delivery costs. Despite improvements in the legal and regulatory frameworks that govern procurement systems, SNGs lack adequate capacity to manage these systems, and often resort to legacy or informal procurement practices.

Accountability to citizens is limited, in part because the central government makes policy and input decisions for services provided at the local level. Nearly half of subnational spending is in the education and health sectors, yet departments and municipalities have very limited control over the policy design and resource allocation in these sectors. For instance, departments pay teachers and health workers' salaries, but they have no authority to determine salaries or to dismiss workers. These sectors are largely financed with earmarked transfers and taxes.

Low subnational tax mobilization

Subnational tax mobilization is relatively modest compared to other countries with similar levels of expenditure decentralization and local revenues are concentrated in a few jurisdictions. Subnational taxes represent about a fourth of total tax revenue, of which approximately two-thirds is earmarked for specific sector expenditures as these taxes were 'ceded' or devolved by the central government.[1] Municipalities and departments raise 3.5 percent of GDP in tax revenues. Colombia's property tax collection was 2.1 percent of GDP in 2016, which is above Latin American average (0.8 percent of GDP) and approaching OECD countries (2.6 percent of GDP, with the UK at the highest level of 4.0 percent). There are several initiatives under way to improve local tax mobilization, including the incremental tax financing pilot for housing in Medellin.

Transfers account for over 65 percent of total subnational revenues, with the bulk of the resources coming from the heavily earmarked *Sistema General de Participaciones* (SGP). These transfers are governed by a rigid set of rules that leaves little space for incentive

1 The so-called '*rentas cedidas*' were originally national taxes that were already earmarked.

schemes or local discretion. The revenues shared with departments are allocated in the following manner: (i) 60 percent is to be spent on education; (ii) 20 percent on health; and (iii) the remaining 20 percent on either education or health. Departments have discretion as to how to use the transfers within the sector, after salaries have been paid, but surpluses are rare. For municipalities, revenue sharing is also defined, but slightly less strictly: (i) 30 percent is to be spent on basic education (infrastructure, equipment, or personnel); (ii) 25 percent on health; (iii) 20 percent on water supply (except in municipalities that have already achieved 70 percent coverage), 5 percent on physical education, and the remaining 20 percent on housing, welfare, debt service, and other functions.

Most departments and municipalities control very few revenues for which they are fully politically accountable to residents; they have little incentives and few means to increase revenue. The current departmental tax system depends heavily on excise taxes, and resources are dedicated to collecting low taxes which yield almost no revenue. Most Colombian municipalities have an outdated property tax base and impose very low rates. Local governments have little incentive to do otherwise, and so remain almost completely dependent on transfers. More could also be done to turn the current local business tax into a more effective source of revenues, at least in larger cities. The absence of an updated land cadaster is an additional problem. The central *Instituto Geográfico Augustín Codazzi* – (IGAC) is responsible for cadasters but is slow and expensive for municipalities.[2]

Low quality and high fragmentation of investment spending

The provision of infrastructure services (tertiary roads, water, sanitation) has been increasingly delegated to subnational governments, but their capacity to prepare and implement projects has lagged. Departments and municipalities have received very little assistance for capacity building, while having to respond to changing and inconsistent directives from the central government.

Subnational capital spending is very fragmented and often of low quality. There is little correlation between the level of investment per capita (generally homogenous, except for departments and municipalities that receive more royalties) and the quality of infrastructure.

A variety of methodologies are used in allocation and control of resources for funding infrastructure, and the SGR financing mechanism is complex. Most municipalities have difficulties complying with its criteria. The SGR requires resources to be spent on projects that have been previously evaluated and approved by management and a central committee (OCAD). It provides a more rigorous framework for preparation and selection of projects, which could be simplified and used as a standard for the other funding sources.

High interregional inequalities and persistent vertical and horizontal imbalances

Regional inequality in GDP per capita is higher in Colombia than in other Latin America and the rest of the world. Resource-rich regions have

2 See also Policy Note #9 on Territorial Development.

grown faster than others and have higher GDP per capita, but they still suffer from high levels of poverty and inequality.[3] Regional disparities and growth opportunities are also influenced by topography: high mountain ranges isolate many regions and the infrastructure needed to connect them is lacking. The network of roads and railways is low relative to GDP per capita[4], especially compared to other Latin American or OECD countries. Government capacity is a critical determinant of local economic performance, and is closely correlated with the capacity of municipal governments to provide services (particularly to the poor) and develop infrastructure.

Significant vertical and horizontal imbalances need to be tackled. The central government still collects over 65 percent of tax revenue. Bogota, Medellin, Cali, Barranquilla and Cartagena account for about two-thirds of taxes mobilized at the subnational level. These municipalities collect more revenue and they benefit from agglomeration effects and economies of scale, enabling them to offer more and better services at a lower cost. Large metropolitan areas attract migrants as a result of higher levels of public services. Providing similar services is often costlier in smaller jurisdictions, where local governments have a narrower economic base and lower capacity to administer taxes. As such, they face a higher vertical imbalance. For resource allocation purposes departments and municipalities are divided into categories. The largest, richest (and most urbanized) are characterized as special (6 municipalities are in this category). There are four other categories (1-4): category 4 departments are those with the lowest population and incomes. There are 6 other categories for municipalities; 6 is the smallest, and usually the poorest and most rural. Of 1,102 municipalities in Colombia, 975 are in category 6.

The transfer system currently does not consider or compensate for differences in fiscal capacity. While the SGP distributes transfers (3.8 percent of GDP) more evenly, SGR transfers (1.5 percent of GDP) to subnational levels vary substantially. SGP resources use a formula that considers the population served and the population to be served, as well as administrative efficiency and territorial equity criteria[5], but not local fiscal capacity. The SGR formula indirectly considers municipalities' and departments' spending needs by taking poverty indicators into account. The aim is not to equalize fiscal capacity but to favor lagging regions; additional investments go to the areas, mostly remote, that suffer from poverty and inadequate access to basic public services. The government is preparing a proposal for the revision of the formula that is intended to remove and revise some of the earmarks within sectors to improve allocative efficiency and revise the distribution of unearmarked funds to favor lagging regions.

The 2011 SGR reform significantly improved distribution, however producing regions still receive more resources than the rest. The SGR reform changed the formula so that revenues from the oil and mining sector could be more evenly distributed across departments. Prior to this, half the royalties were concentrated in only four producing departments. The new formula has also shifted the division of SGR resources to departments at the expense of municipalities. Royalties are presently the main source of department finance for public investment. SGR has been important in sustaining the level of investment by providing a more predictable source of funding for subnational projects.

3 See also Policy Note #9 on Territorial Development.
4 Olaberría (2017).
5 Law 715 (2001) and Law 1176 (2007).

Subnational capital spending financed by royalties focuses on four main areas: improving road connectivity, research and development projects, improving delivery of education in the regions and purifying water.[6] One of the objectives of the reform was to reduce fragmentation by making departments responsible for investments across municipalities. There are early indications that the average size of projects has increased after the SGR reform.[7]

Policy Options

Key reform priorities to improve the intergovernmental framework are to: (i) carry out a formal review of the assignment of expenditure responsibilities and the classification of municipalities, and to delegate tasks only to municipalities able to execute them, while increasing their autonomy to manage such services; (ii) enhance departments' and municipalities' capacity to raise their own revenues, by updating and modernizing cadastral and land registries and improving tax administration; (iii) streamline the process of preparation and selection across funding streams and reduce earmarking of capital transfers; and (iv) revise the transfer formula to strengthen equalization to ensure that governments with different fiscal capacities have equal capacities to provide public services. Each of these recommendations is consistent with the findings of the *Comisión del Gasto y la Inversión Pública* of December 2017.[8]

Carry out a formal review of the delegation of expenditure responsibilities and the classification of municipalities and only delegating functions to municipalities with the capacity to carry them out, while increasing their autonomy to manage such services

An asymmetric approach implies the delegation of responsibilities to municipalities in accordance with the capacity to fulfill them. In jurisdictions where capacity is weak or absent, departments or the central government should retain service delivery functions. Asymmetric decentralization could be implemented in two ways: (i) devolving competencies to the most capable SNGs; and (ii) simplifying reporting mechanisms of weaker SNGs to alleviate the administrative burden. In this review of delegation of responsibilities, it may be important to re-think what is decentralized and why. In addition, mechanisms need to be developed so that subnational governments have more flexibility to execute expenditures (within well-defined parameters and where capacity exists) to increase autonomy to manage these services and generate incentives to improve them.

There is a framework for carrying out asymmetric decentralization, but it has yet to be implemented. As part of the National Development Plan[9], a program for the delegation of different competencies (*Programa Nacional de Delegación de Competencias Diferencia-*

6 OECD (2014 and 2017).
7 Ministerio de Hacienda y Crédito Publico (2018).
8 Among its recommendations were: Reform the General Royalties System (SGR) to (i) eliminate the rigidities stemming from the percentages established in the constitutional norms for specific destinations; (ii) integrate its resources with those of the national central government and those of the territorial entities in a joint system of investment planning, programming and execution of investment spending impacting the regions; (iii) allow the royalties resources to finance territorial debt payments relating to health, pensions and judicial decisions, among other things; (iv) revise the percentages of royalties allocated to producing municipalities, whose low level has eliminated the incentive for local support to mining and oil projects; and (v) establish norms that encourage the financing of significant projects and that prevent the atomization of resources. (Comisión del Gasto y la Inversión Pública, 2017).
9 Departamento Nacional de Planeación (2015b).

das, PNCD) was created to guarantee efficient service delivery by the state. The PNCD delegates competencies to subnational entities that comply with criteria related to financial, technical and institutional capacity. The PNCD is managed by a steering committee of the National Planning Department (*Departamento Nacional de Planeación*, DNP), the Ministry of Finance and Public Credit (*Ministerio de Hacienda y Crédito Público*, MHCP) and MOI (Ministry of Interior) and of representatives from sectoral ministries. This steering committee identifies competencies and functions to be delegated.[10] There are two groups of criteria: general and specific.

Specific (sectoral) criteria are defined by the DNP and the relevant sectoral ministries. For municipalities, general criteria include: strong capacity; a population greater than 25,000; a high or intermediate development environment; or a low development environment within a high-development department.

Of importance are the definitions of capacity and level of development. Capacity is constructed from proxy variables and the ability to plan and manage finances and investment using IMF and OECD methodologies.[11] Variables are selected based on the availability of departmental and municipal information. The indicator for the level of development is related to participation in the national economy, urbanization, connectivity, average income levels and low crime rates. All these variables may be good proxies for the administrative and financial capacity of municipalities to deliver services. Nevertheless, it would be important to review the criteria, to see whether they adequately capture the varying capacities of the municipalities and departments involved.

While the framework was designed to delegate additional competencies to subnational governments, it could also be used to allow more flexibility in the use of transfers. This could work by identifying municipalities above a certain level of capacity and development environment (for example, above the 50th or 75th percentile). These municipalities could then reduce earmarking for specific sectors, as long as performance or service delivery in the sector remains above a target level. For example, in municipalities meetings these criteria, the 5.2 percent of the SGP plus the 60 percent of the "general purpose" expenditure allocated to water and sanitation would not be required to be spent on water and sanitation (and would become additional non-earmarked "general purpose" expenditure). This would not mean that there would be no spending on water and sanitation; it would simply mean that the municipality would be free to allocate the resources, if the service delivery levels were maintained.

There could be similar criteria for health and education, with no requirement for mandatory spending levels if certain service delivery targets are met. Education and health outcomes could be measured, for example, by the performance on the "*Prueba Saber*." There could also be a requirement to comply with all existing contractual commitments (including payroll and pensions). Failure to do so would result in a re-imposition of the mandatory spending levels. In practice, given that many elements of education and health policy are determined at the national level, municipalities would not have much more spending freedom, even if spending allocations were relaxed. It would also provide incentives for municipalities to improve performance outcomes

10 Departamento Nacional de Planeación (2016).
11 Mizell and Allain-Dupré (2013), Dabla-Norris et al. (2011).

and strengthen capacity. The proposed policy also builds upon existing institutional arrangements (especially the PNCD) and the recommendations of the *Comisión del Gasto y la Inversión Pública*. Providing greater flexibility and autonomy to local governments with higher capacity and better outcomes, could also be used to reduce the administrative burden on lower capacity municipalities by reducing the degree of detail required in financial reporting by placing more emphasis on reporting the results of service delivery.

Enhance the capacity of departments and municipalities to raise own-source revenues, through updating and modernizing the cadastral and land registries and improving tax administration

Increasing own-source revenue mobilization of departments and municipalities would help finance services and establish accountability links with citizens. Lower dependence on transfers would also reduce pressure on the central government. Positive experiences with high-capacity governments being responsible for updating property cadasters could be replicated for a larger group of municipalities. At the same time, the choice of taxes also needs to minimize potential distortions. Specific measures could include:[12]

- Asymmetric decentralization of the cadaster administration.[13]
- Elimination of taxes with low yield but high administrative costs (i.e., sellos).
- Improvement in the design and administration of automobile and gasoline taxes.
- Establishment of central rules to encourage property tax compliance.
- Introduction of a flat rate for the local business and industry tax to reduce distortions.

In addition to the continuing efforts to update and modernize the cadastral and land registries[14], the central government could consider: (i) an information management platform to help local government administer property and other local taxes; and (ii) matching grants to reward tax collection at the local level.

In the medium term, SNGs need to be able to raise own-source revenues and to have more flexibility in their use, through (i) allowing instruments such as congestion charges or tolls; and (ii) promoting more flexibility in terms of user tariffs and local fees and optimize income from properties (rents, dividends).

Adopt a single streamlined process for the preparation and selection of investments across funding streams and reducing earmarking of capital transfers

A systematic approach to capacity building for public investment is needed to improve the quality of infrastructure services. Most municipalities have limited institutional capacity and implement only small-scale projects. Procedures to access resources for investment and financial reporting requirements need to be consolidated and streamlined. The General Adjusted Methodology[15], currently used unevenly by municipalities, should be simplified. The appraisal methodology needs to be differentiated according to the size and complexity of projects and, whenever possible, standardized designs (for example, for schools and primary health care facilities) should be used.

12 The last four items in the list are addressed by the proposed Territorial Tax Code.
13 See also Policy Note #9 on Territorial Development.
14 See also Policy Note #9 on Territorial Development.
15 Departamento Nacional de Planeación (2015a).

The central government should also continue to invest in strengthening the public investment management system at the central and subnational levels. Developing institutional capacity for more systematic preparation, appraisal, selection and implementation of infrastructure investment projects at the local level needs to be prioritized. Greater links between planning and budgeting, and incentives to support horizontal cooperation across jurisdictions, are needed to support more strategic investment. This will be particularly helpful for strengthening functional urban areas.[16]

Revise the transfer formula to strengthen equalization to ensure that governments with different fiscal capacities have equal abilities to provide public services

The intergovernmental fiscal system needs to help offset the disadvantages with variations in development and fiscal capacities across subnational jurisdictions. Without improving equalization, it will be difficult to address the persistent differences in access and quality of basic services across municipalities. In addition to supporting own-source revenue mobilization, it is also important to assist municipalities to balance higher unit costs of provision with a lower revenue base.

To reduce horizontal inequality, the SGP and SGR should be revised to include:

- An updated categorization of departments and municipalities to better capture the variation in their fiscal and administrative capacity.
- Unconditional transfers that are inversely distributed according to fiscal capacity (measured by the difference between the population-weighted average of the tax base and the departments' or municipalities' tax base) and human development.
- Conditional transfers to be distributed according to improvements in tax collection to encourage own source mobilization. Departments and municipalities that increase local tax collection are to receive additional resources.
- Block grants to compensate departments and municipalities to which additional service delivery responsibilities have been devolved, according to the principle that funding should follow function.

The objective is to have a minimum standard of basic services that are provided across territories by equalizing the capacity of subnational governments to finance them. Fiscal capacity and development should be measured using objective indicators that are regularly calculated by the central government. In addition to the ongoing efforts to update the cadaster, it would be necessary to improve the frequency and quality of data collected on local development and fiscal capacity. In the medium term, it is critical to continue reforms to ensure the coherence and complementarity of the components of the intergovernmental fiscal framework and establish a comprehensive strategy to guide the sequencing of the decentralization reforms.

16 See also Policy Note #9 on Territorial Development.

Annex 7.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Enhance the efficiency of subnational spending and focus on results	• Introduce an asymmetric assignment of responsibilities that delegates more functions to municipalities with the capacity to fulfill them, while in the municipalities where capacity is absent departments retain service delivery functions • Simplify transfers and grants reporting mechanisms for small municipalities to alleviate their administrative burden and incentivize compliance • Reduce earmarking in the business and gasoline taxes and increase the flexibility to execute expenditures (for subnational governments with higher capacity) to increase autonomy the delivery of services	• Improve central monitoring and evaluation system of local service delivery outcomes • Increase financial support for institutional building at the departmental and municipal level • Introduce results-based grants to incentivize improvements in local service delivery • Simplify and streamline the budgetary system at the central and subnational levels • Implement a single integrated financial management information system for subnational entities (i.e. Guatemala and Mexico).
2. Improve the quality of the design and selection of subnational investment projects	• Simplify the General Adjusted Methodology and differentiate appraisal methodologies according to the size or complexity of projects • Establish a facility to provide technical assistance to low-capacity departments and municipalities in the preparation of medium-size and large investment projects • Introduce matching grants/especial incentives to finance subnational projects that undergo a more rigorous appraisal and selection process for medium-size and large projects • Increase financial incentives for regional cooperation across jurisdictions to strengthen in particular functional metropolitan areas • Reduce the earmarking in transfers and improve targeting of resources.	• Improve the links between planning and budgeting at the central and subnational levels • Create a program to support systematic capacity building for public investment management at the subnational level • Simplify the system to approve and monitor the projects financed by the SGR

Annex 7.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
3. Increase own source revenue mobilization to reduce transfer dependency and increase local accountability	• Reduce the number of earmarked taxes. • Provide funding and technical assistance to enhance the capacity of municipalities to raise property taxes, including updating and modernizing the cadastral and land registries • Pass a new departmental and municipal tax code defining tax bases and establishing ranges of rates a. Allow municipalities to use instruments such as congestion charges or tolls b. Promote more flexibility in the administration of user tariffs and local fees and optimize income from properties (rents, dividends) c. Revise the business tax to reduce distortions d. Unify excise tax rates and gasoline surcharges	• Provide additional revenue-raising powers to the largest departments and municipalities (within establish parameters) • Streamline the portfolio of taxes levied by departments and municipalities and promote shared taxation between the central and subnational governments • Provide technical assistance to departmental and municipal tax administrations • Provide a common information management platform for tax administration/collection
4. Ensure that governments with different fiscal capacities have equal ability to provide basic public services.	• Establish a regional measure of well-being • Review the allocation formulae for SGP and SGR to account for population changes, disparities in regional well-being, and the gap between resources and mandates to deliver basic public services	• Simplify the intergovernmental fiscal framework and establish a comprehensive strategy to guide the sequencing of the decentralization reforms

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PLAZA
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NOTE 8

PEACE CONSOLIDATION

After decades of fighting, a peace accord between the Colombian government and the Revolutionary Armed Forces of Colombia (FARC-EP, or "FARC") was signed on November 24, 2016. By March 2017, more than 7,000 FARC guerrillas had moved from their bases of support in 242 municipalities across 11 regions of the country to 26 rural "zones of concentration", where they began to disarm under United Nations' supervision. The FARC completed the disarmament process on June 27, 2017 and turned itself into a political party. However, building a sustainable peace remains a challenge. Moreover, the illegal economy and new forms of paramilitary violence have been growing, jeopardizing the broader peace building efforts across Colombia.

Context and Reform Progress

Lasting peace is within reach. For decades, Colombia has been trapped in a cycle of violence that was rooted in inequality, poverty, and weak local institutions. The prolonged armed conflict made things worse. The end to the five-decade old armed conflict, which affected the lives of three generations, creates an opportunity for building a sustainable peace that could pave the way for inclusive development and progress in reducing poverty. The country is at the beginning of a long and challenging process of societal transformation and territorial development.

Over 8 million people became victims during the conflict and nearly 7 million of them were internally displaced. They are among the poorest and most vulnerable citizens, and it is estimated that the internally displaced people represent half of the extreme poor. The post-conflict era brings challenges, but it also presents the opportunity to address important issues: uneven territorial development, inequity, and extreme poverty. Building confidence among the victims and those excluded, through effective delivery of social services, could help solidify stability and support their aspirations for peace and prosperity. Rebuilding the social fabric could help Colombians realize their potential.

The 2016 peace agreement[1] represents an opportunity not only to end the armed confrontation, but also to address many of the key

1 "Peace Agreement" (PA) refers to the "Final agreement to end the armed conflict and build a stable and lasting peace", signed between the government of Colombia and the Revolutionary Armed Forces of Colombia at the Colón Theater in Bogotá, on November 24th, 2016.

drivers behind the political polarization and violence. The adequate and timely implementation of the peace agreement is widely seen in Colombia as a test of the commitment to tackling the problems of exclusion, inequity and regional imbalances, and to reducing extreme poverty and promoting shared growth and prosperity for all Colombians. Newly elected officials face the legacy of an historical peace agreement at the early stages of implementation; critical confidence-building measures are needed for its successful implementation. Meanwhile, other violent actors in the country represent a threat for a sustainable peace.

The main priorities presented in this note reflect the mandate, global experience and comparative advantage of the World Bank. This note will focus on peace consolidation through: (i) land restitution; (ii) reincorporation of former combatants; (iii) elimination of illicit crops; and (iv) reparation of the victims of the conflict.

Main Challenges

Land Restitution

Conflict and post-conflict municipalities are often characterized by massive displacement, forced abandonment of property and assets, and land dispossession. People that have been forced to leave their homes and communities are vulnerable as lack of access to their land leads to economic deprivation. Displacement through armed conflict and violence affects negatively social cohesion by disrupting home communities, and by creating tensions when new members join host communities. Robust economic growth is therefore not sufficient to prevent a relapse into violence and the return of instability in post-conflict situations. Significant social challenges must also be addressed, including rebuilding communities' ties, and social cohesion.

Political economy issues underpin conflicts around land. Vested interests of diverse groups and stakeholders that seek to secure land, combined with weak government capacity, can result in violence and conflicts. Access to land has typically been a fundamental reason for conflict and violence, because land represents an asset, an important source of income for rural populations, and it is also closely linked to the history and culture of communities. Land access is a critical factor for development: (i) at the beginning of a conflict that forces people to leave their homes and properties disrupting development; and (ii) upon the return to their homes once the conflict ends as they seek to restore their livelihoods.

Land restitution is an instrument for recovering land (including housing and other valuable assets) that were lost during a conflict.[2] Colombia's land restitution policy is implemented through a hybrid process conducted by the Land Restitution Unit, which represents the administrative branch, and by the Land Restitution Courts as part of the judicial branch. Given the presence of other armed groups the restitution measures are being executed gradually and progressively. Previous high-density areas affected by the conflict where the improvements in the security conditions enable internally displaced people (IDP) to return are given priority. By December 2017, more than 110,000 claims have been received by the Land Restitution Unit. Of these, nearly 42,500 claims have completed the administrative process; around 234,200 hectares have a restitution ruling; and more than 3,000 productive projects have been implemented on restituted land.

2 Brookings Institution and London School of Economics (2012).

Land restitution is contributing to the peace building process. The land tenure rights that are being reestablished enable access to markets and public services; foster public and private investments; strengthen communities; and could help prevent potential new conflicts. The restitution policy includes complementary government measures to support income generation activities and productive projects; these have had high rates of success in getting families back on track, improving their economic situation and restoring livelihoods.

Reincorporation of former combatants

Reincorporation and normalization of the situation of former combatants is as a critical pillar of the post-conflict stabilization and recovery agenda. They are central to reinforcing security and safety at the community level, to providing productive options for former combatants, and generally to consolidating peace. Experiences in different countries demonstrate that stabilization and the resumption of a normal life by former combatants can contribute to supporting economic growth and to constructing a more harmonious social structure; it may also help prevent new tensions. Supporting ex-combatants and individuals formerly engaged in violent activities to transition to civilian life, as socially responsible and economically self-sufficient individuals, through socioeconomic reincorporation activities is a difficult undertaking but an essential element of constructing sustainable peace.

Colombia has a long history of implementing strategies and programs to support ex-combatants' transition to civilian life. Up to 20,000 former combatants discharged as part of the Santa Fe de Ralito process are still part of the ARN[3] program and are in the process of being reintegrated. Many former combatants are expected to continue to take advantage of the government's (GoC) individual demobilization policy[4]; and about 7,000 former FARC combatants that were demobilized collectively as part of the implementation of the Havana peace process will require support from associative economic activities in areas where markets and market access need to be developed.

Several, partly inconsistent policy frameworks are used, however, in the process of reincorporating former combatants. The policy-making document CONPES 3554 of December 2008 established the general framework for Disarmament, Demobilization and Reintegration of former combatants (DDR).[5] This document was based on the normative framework of the Colombian Constitution; as well as on multiple laws and discussions in the Congress the Courts, and the executive on DDR; and on international treaties on human rights and international human rights law.

- CONPES 3554 determines the scope of each component of the DDR program.
- Law 418 of 1997 allows the executive to hold peace negotiations with illegal armed groups and to consent to benefits for ex-combatants to be reincorporated into civilian life.
- Laws 548 of 1999, 782 of 2002, and 1106 of 2006, extended this law.
- Law 975 of 2005, known as the Justice and Peace Law, and Law 1424 of 2010 establish juridical benefits for ex-combatants.
- Law 782 frames the procedures and condi-

3 Colombian Agency for the Reincorporation and Normalization (ARN), formerly Colombian Agency for Reintegration (ACR).
4 Including former combatants from FARC, ELN and other groups, demobilizing through the "individual process".
5 DDR, Disarmament, Demobilization and Reintegration of former combatants.

tions of the demobilization and reintegration process.[6]

The Peace Accord brings yet another juridical framework for the demobilization and reincorporation of former combatants, creating a situation where different groups of former fighters share a single program supporting their reintegration, but are subject to different legislations with different processes and scope. These complex conditions threaten the process of reincorporation, as well as any kind of cohesive reconciliation between former fighters of different groups, who were demobilized at different times.

A key issue related to these legacy challenges are the persistent discrepancies that affect program beneficiaries. There are significant legal gaps and discrepancies in the applicable legal framework, including the Justice and Peace Law and the Law 1424 of 2010. As a legacy challenge, there are already differences in treatment among ARN beneficiaries. Such pre-existing weaknesses could easily be magnified with the surge in additional beneficiaries resulting from the peace accord negotiated with the FARC.

Elimination of illicit crops

There has been mixed progress in the implementation of the Colombian government's strategy for both eradication and the substitution of illicit crops. The largest presence of illicit crops is concentrated in 29 municipalities. According to a Report by UNODC and the Ideas for Peace Foundation (*Fundación Ideas para la Paz*, FIP), 36 percent of respondents do not know how to read or write, 68 percent of children do not go to school, 97 percent do not have access to health services and only 13 percent certify that they own their property.[7] It is clear that in areas where informal land tenure is pervasive, illicit crops proliferate, which in turn generates multiple types of conflicts among its inhabitants. Recently, clashes between rival armed groups to fill the vacuum of power created by the demobilization of the FARC, have seriously affected the security conditions.

The persistence of the drugs problem is linked to poverty, marginalization, and underdevelopment in coca-producing areas.[8] To address the development-related obstacles, on January 27th, 2017 the GoC launched a new National Comprehensive Program for the Substitution of Crops Used for Illicit Purposes (*Programa Nacional Integral para la Susitución Voluntaria de Cultivos Ilícitos,* PNIS) as part of the Comprehensive Rural Reform (CRR) agenda.[9] The PNIS is regulated by the Decreto Ley 896 of May 29, 2017, and is being implemented jointly by the Directorate for the Substitution of Illegal Crops (Office of the Higher Presidential Adviser for the Post-Conflict – Presidency of the Republic) and the FARC.

With mounting international and domestic pressure to reduce coca cultivation, in February 2017 the GoC announced a strategy to eliminate 100,000 hectares of coca crops: 50 percent through enforced eradication, and 50 percent through community-driven voluntary substitution in line with the PNIS scheme.[10] According to GoC, 88 percent (44,000 hectares) of the enforced eradication goal has already been achieved, however only 7,800 hectares

6 CONPES 354, p 5.
7 UNODC and FIP (2018).
8 PA (2016).
9 PA (2016).
10 El Heraldo (2017).

have been voluntarily substituted according to UNODC, with 29 collective agreements under the PNIS framework signed between the GoC and coca-growing communities.[11] However, there are significant tensions between eradication and substitution goals. Coordination between security forces (police and military) and the Directorate for the Substitution of Illegal Crops is inadequate, and the parallel implementation of enforced eradication and voluntary substitution quotas undermines the population's trust in the PNIS.

Moreover, the PNIS relies heavily on cash transfers, and it is not being implemented within the framework of the CRR or within a more general integral multi-year development agenda. The integral development actions and funds required for successful implementation of the PNIS depend on various government stakeholders. Despite Article 5 of the Decreto Ley 896[12], which states that inter-institutional cooperation is critical to the implementation of the PNIS, there is little clarity on how this should take place. There is also little clarity on the roles of key stakeholders, such as the Ministry of Agriculture, the Agency for Territorial Renewal, the National Land Agency and the Rural Development Agency.

Lack of clarity on sequencing have also plagued the design and implementation of two key post-conflict development planning instruments vis-à-vis the PNIS: Development Programs with a Territorial-Based Focus (*Programas de Desarrollo con Enfoque Territorial*, PDET), and the Comprehensive Community-based and Municipal Plans for the Substitution of Illicit Crops and Alternative Agrarian Development (*Planes Integrales Comunitarios y Municipales para la Sustitución de Cultivos Ilícitos y Desarrollo Agrario Alternativo*, PISDA). The GoC has clarified how these instruments are going to be constructed at a local level. However, the links between the PNIS and the PDET and PISDA remain unclear.[13] Guidance on the proper sequencing of peacebuilding and development actions in drugs-producing municipalities is necessary.

Reparation for victims

Reparation for the victims of the armed conflict is key for reconciliation and peaceful coexistence. The GoC has stated its commitments for the reparation of the victims several times, but Law 1448 of 2011 on victims´ reparation was enacted in a very different political and economic context. The legislation contemplated at the time was dealing with a universe of victims of less than one million.[14] The 2011 CONPES document 3712 on financing for the implementation and sustainability of Law 1448, estimated that the overall cost of implementation would fall from 1 percent of the country's GDP (US$ 3.4 billion) in the first year and gradually decline to 0.75 percent of GDP by 2021. Nevertheless, there are over 8.5 million registered victims (of which 6.65 million are vetted for integral reparation), with only four years left to implement the law and by 2017 only around 615,000[15] victims had received administrative

11 El Tiempo (2017).
12 Participation of national entities on the PNIS.
13 Recent academic studies have argued that the PNIS implementation presents challenging economic considerations. Per GoC estimates, the number of PNIS beneficiaries could rise to 132,774 in the coming months. If so, the GoC would need COP 4.7 billion to cover cash transfers for these beneficiaries. This figure, however, does not include the development interventions as part of the CRR.
14 The CONPES 3712 shows 830,000 victimizing acts, of which 618,000 were associated solely with forced displacement, 134,000 cases of other victimizing acts and 78,000 that were simultaneously victims of forced displacement and another victimizing fact.
15 Of which only 580,415 are part of the National Victims Registry.

compensations. Furthermore, of the 522 collective reparation subjects included in the National Victims Registry[16], only a few have been fully compensated. Consequently, the reparation of the approximate 6.65 million eligible victims no longer seems technically or fiscally feasible under the terms described in Law 1448 and its interpretations by the constitutional court, given that it would require nearly 4.5 percent[17] of the GDP over the next 4 years.

Policy Options

Land Restitution

Process all restitution claims. An important step will be for the Land Restitution Unit to estimate the number of claims that might not be processed before 2021, due to demining and security considerations. This could involve two possible solutions: (i) to process an extension of the Law in Congress, providing all data related to the land restitution claims, an analysis of the security conditions, and the pace of implementation of the restitution claims; or (ii) without modifying the validity period of the Law, to compensate those claimants who cannot get restitution for their property, as a result of security conditions, within the original 10-year span of the Law. The latter solution appears to be envisaged by the statement of the Colombian Constitutional Court (Sentence T-679 of 2015) that the right to restitution "cannot remain indefinite in time. In effect, the Colombian State is obliged to create tools that expedite those processes, despite the factual circumstances that prevent it."

In the case of compensation of claimants without an extension of the law, the recommendations to the Land Restitution Unit are: (i) to estimate the fiscal effort necessary to process a larger number of cases; (ii) to adjust its procedures to resolve restitution claims in those cases in which field visits cannot be carried out due to adverse security situations; (iii) to strengthen the capacity of the Land Restitution Unit Fund to process more compensation cases; and (iv) to coordinate with the Office of the Attorney General to carry out the corresponding criminal investigations related to forced displacement, dispossession and abandonment of lands, and related crimes.

Strengthening interinstitutional coordination. Document CONPES 3712 of 2011 created a financing plan for Law 1448 of 2011, including budgetary estimates related to the public policy for land restitution. Initially there were no expenses associated with the policy for entities other than the Land Restitution Unit, which received an allocation of COP 2.95 trillion. The following year, the National Council of Economic and Social Policy adjusted the plan, with CONPES document 3726 of 2012. These changes recognized that restitution measures had additional expenses related to inter-institutional coordination. The resources for the *Instituto Geográfico Agustín Codazzi* (IGAC) were adjusted (COP 323 billion) to allow for an update of rural cadasters; the INCODER[18] received COP 374 billion to update land tenure and use; SNR received COP 449 billion for updating and certifying land tenure and for registering measures associated with Law 1448 of 2011; and the Superior Council of the Judiciary was allocated COP 102 billion. The allocation of resources allowed for management indicators for the Land Restitution Unit, which the unit is required to report on semi-annually. However, the resource allocation made to other enti-

16 Of which 300 are ethnic subjects, 222 are non-ethnic, 13 are of national scope and 6 come from the CNRR.
17 For year 2016, 1.31 percent of the GDP was allocated for the implementation of Law 1448. It started at 0.96 percent in 2012 and was always above the projections of CONPES 3712.
18 Today, National Land Agency

ties with land restitution responsibilities do not come with monitoring requirements, which makes it difficult to monitor implementation and assess the effectiveness of the resource use. The recommendation is to establish, for each of the entities involved in the restitution process (IGAC, SNR and ANT), an action plan with activities, products, baseline, indicators, goals, and budget to facilitate implementation and monitoring of the policy. This will also assist with interinstitutional coordination to ensure results and outcomes.

Promoting durable solutions[19] by ensuring sustainable integration in places of origin (land restitution return); or in a third location with similar productive characteristics (compensation). Land return and compensation can constitute durable solutions if they are accompanied by legal, civil, political and economic integration. The IASC Framework on Durable Solutions for Internally Displaced Persons[20] identified eight criteria to measure progress towards durable solutions: (i) safety and security; (ii) adequate standards of living; (iii) access to livelihoods; (iv) restoration of housing, land and property; (v) access to documentation; (vi) access to effective remedies and justice; (vii) family reunification; and (viii) participation in public affairs. These criteria reflect the central role of land and housing for achieving durable solutions[21] and the need to address housing, land and property issues in post-conflict settings through any or all of the following: demining (safety and security); provision of access to land and housing with secure tenure (adequate standards of living, access to livelihood); and restitution and compensation programs (access to effective remedies, restoration of housing, land and property, access to documentation). As part of the restitution program, the recommendation to the Land Restitution Unit (*Unidad de Restitución de Tierra*, URT) is to strengthen productive projects on restituted land to support rural development, with the aim of preventing future conflicts.

The reincorporation of former combatants

The consistent and predictable application of demobilization measures to three distinct beneficiary groups will be key. The first group consists of the current beneficiaries from previous peace accords like the Santa Fe de Ralito Agreement between the GoC and the AUC[22], or groups that are pursuing individual demobilization track. This group has been supported by ARN for the last 12 years. A second group is the large number of persons who demobilized collectively through the peace agreement between the government of Colombia and the FARC. A third group will likely include individuals who continue to leave factions of the FARC that are not party to the peace agreement (dissidents); it may also include existing guerrilla groups that have not reached a peace accord such as the ELN.

Standardization of the legal framework is an imperative for current and future beneficiaries, including persons already graduating from the reintegration program. This legal framework would also be applicable to individuals who

19 "A durable solution is achieved when internally displaced persons (IDPs) no longer have specific assistance and protection needs that are linked to their displacement, and such persons can enjoy their human rights without discrimination resulting from their displacement", IASC, Framework on Durable Solutions for Internally Displaced Persons, April (2010), p.5.

20 The IASC is the primary mechanism for inter-agency coordination of humanitarian assistance. It comprises key UN and non-UN humanitarian partners and was established in June 1992 in response to United Nations General Assembly Resolution 46/182 on the strengthening of humanitarian assistance.

21 While the IASC Framework focuses on IDPs, the criteria identified can also apply in refugee context.

22 AUC stands for United Self-Defense Forces of Colombia, colloquially known as "paramilitaries"

have already benefitted from the reintegration program. This standardization could be achieved by unifying the judicial framework that would apply to all demobilized ex-combatants and by consolidating the scope of existing frameworks. Former combatants would be subject to a single transitional justice framework and the immunity guaranteed by that framework. The framework will need to facilitate reconciliation and reincorporation efforts, regardless of the timing of decommissioning or of the group to which former combatants belonged. These former combatants are expected to include members of the three groups mentioned above.

Dealing with illicit crops

Strengthened coordination between the Directorate for the Substitution of Illicit Crops and the Ministry of Defense will be important. This will involve, in particular, harmonizing the substitution and eradication approaches. A comprehensive coordination strategy will need to: (i) provide security to communities and pro-substitution leaders where the PNIS is being implemented; (ii) secure full territorial control in the coca-rich municipalities; (iii) exercise territorial control over Natural Parks. As the PNIS advances, experts anticipate that field-based personnel of the Directorate for the Substitution of Illicit Crops may face security challenges.[23]

Interventions for sustainable integral development in areas affected by drugs will be possible only if the government institutions work in a coordinated manner[24] and if the PNIS becomes a central component of the RRI. Forced eradication (implemented by the country's security forces) and voluntary initiatives (carried out by the Presidency) must be linked to new and existing activities for rural development, particularly those envisioned under the PDET. This should be done in order to ensure the sustainability of the efforts aimed at eliminating illicit crops. These links will be key to maximizing the construction of peace and the development potential of the funds (ie, cash transfers) t. For example, inter-institutional coordination is urgently needed to address the issue of illicit crops in protected areas, in which 32 percent of the total area of coca cultivation is locates. The slow implementation of the PNIS in these areas is generating new incentives for the cultivation of coca.

The efforts of governments aimed at promoting the integral development of these zones should be framed within a multi-sectoral, multi-annual development agenda guided by efforts that contribute towards achieving Sustainable Development Goals and Human Rights. The effective participation of the affected communities in all phases of planning the development of their territories contributes significantly to the sustainability of the interventions and to the restoration of trust between the civilian population and the State.

The formalization of land tenure for former illicit crops farmers reduces the risk of re-sowing and increases the sustainability of development interventions in these zones. The updating of the cadastral registry can contribute to significantly increasing municipal tax revenue, and consequently strengthen local administration's ability to fulfill their obligations as service providers.

23 In contrast to other civil servants implementing tasks related to the Peace Agreement, the Directorate for the Substitution of Illegal Crops field-based staff do not have a security scheme. Some have requested it but the UNDSS cannot grant it as they are not 'staff members' (personal de planta) but consultants paid through UNODC funds.
24 Windle, (2016).

The deepening of efforts and alliances to attract private investment and social entrepreneurship initiatives to areas where substitution projects are being carried out is fundamental. Inevitably, the public sector needs private investments to promote the economic development of these zones that contributes to securing economic, social, cultural and environmental rights.

Reparation of the victims of the armed conflict

The government's Medium Term Fiscal Framework 2017, in relation to the reparation of victims, is primarily conceived around the compensatory nature of the victim's policy. The MFMP includes the following subtopics: (i) victims' human rights; and (ii) truth, which tries to provide content that satisfies the demands of those who have been affected by the conflict. In order to achieve the objectives of the Victim's Law, within the current fiscal constraints and the implementation challenges derived from the high number of registered victims (more than 8 million), it is necessary to: (i) extend the period of applicability of the Law; (ii) revise their eligibility criteria; and (iii) refocus the priorities of reparation for the collective subjects.

Extend Law 1448 by at least ten years in addition beyond the current end date limit of the year 2021. Under the law's current provisions, by 2021 all victims must be repaired before the legal framework expires (resulting in the expiration of legal rights). This leaves only three years for the implementation of the Law. With more than seven million cases of victims that still need to be resolved, only extending the period of validity by at least ten years would make it possible to provide reparations to the total number of victims. Extending the Law's period of applicability would also allow it to be aligned with the commitments under the peace agreement.

Review the eligibility criteria of individual victims in order to focus on those most affected. The Unified Victim Registry includes a total of 8,625,631 victims as of February 2018. 6,589,325 are entitled to reparation. Although registration is now closed, many victims are still being included through judicial decisions or "guardianships". It is critical that the executive branch reach consensus with the judiciary and legislative powers on the criteria that must be applied for a revised eligibility of victims in the Registry. Criteria should not take into account the "vulnerability" based on needs, which turns the program into a social protection strategy, but to focus on the "acts of victimization" that are directly related to the impacts of the armed conflict on this population.

Putting the focus on collective reparations for the delivery of reparation activities. The estimated total burden of collective reparations is about 3 percent of the total costs of reparations in Colombia. However, collective cases have a huge impact in terms of reconciliation and recognition of acts of victimization, particularly for indigenous peoples and the Afro-descendant population. Although it is recognized that the process of implementing collective reparations requires more intense work than individual (or "administrative") reparations, their footprint in terms of contribution to peacebuilding and reconciliation is much more significant. The leveraging of investments made in recent years to develop a methodology for collective reparations provides the best short-term value for the Colombian government.

Annex 8.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Ensure adequate land restitution for victims	• Strengthen productive measures in restituted land	• Process in Congress an extension of the Law, supporting such request with the figures related to the universe of land restitution claims, the analysis of security conditions, and the pace of implementation of the restitution claims • Set up an action plan for each one of the entities involved in the restitution process (IGAC, SNR and ANT) with activities, products, baseline, indicators, goals, and budget.
2. Ensure the effective reintegration of former combatants	• Harmonize the legal framework for demobilization and reintegration	
3. Eliminate illicit crops	• Harmonize substitution and forceful eradication approaches • Link the PNIS with the PDET and PISDA • Promote integral development through a multisectorial and strong community participation approach during the various implementation phases. • Form alliances with the private sector to foster development in these areas.	• Strengthen coordination mechanisms between the Directorate for the Substitution of Illegal Crops and the Ministry of Defense • Formalize land tenure and update the cadastre
4. Ensure adequate reparation to the victims of the armed conflict	• Ensure a sustainable and fiscally-sound implementation of the Victims' Law, focusing on collective reparations	• Extend the period of validity of Victims' Law by at least 10 years, and revise the eligibility criteria for individual victims to focus on the most affected

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NOTE 9

TERRITORIAL DEVELOPMENT

Growth has been characterized by an unequal territorial development, where deep regional inequalities have persisted across time. The past administration has devoted considerable efforts to the territorial development agenda, however some challenges have persisted. This note has grouped key challenges along four cross-cutting sectoral lines: (i) incomplete information systems for decision making; (ii) poor coordination among the institutions responsible for territorial planning; (iii) fragmented programs and incentives for territorial development; and (iv) limited connectivity infrastructure. Policy recommendations are also structured following the same themes, emphasizing on the concept of a portfolio of places, where public investment should be guided by broad distinctions of territories according to function. Recommendations further stress the need to build on the tools, policies and institutions that already exist, focusing on simplifying and streamlining the processes, directing the effective implementation of programs, and providing economic incentives, in lieu of excessive regulation, to achieve better results.

Context and Reform Progress

Strong economic growth in Colombia over the past decade has not been felt equally throughout the country. Colombia boasts Latin America's fourth-largest economy and has been one of the region's solid performers in terms of economic growth, but persistent regional disparities present a challenge for future development. Regional inequalities are 42 times higher than in Australia and more than 5 times higher than in Canada or the United States, they are also higher than in most neighboring Latin American countries.[1] Development in Colombia has failed to include large areas of land and large segments of the population. Gaps in poverty rates and standards of living persist between urban and rural areas, across regions, and even within departments and municipalities. Regions face disparate challenges, depending on: location and geography; economic specialization; environmental features; and the incidence of social unrest and armed conflict.

Persistent regional gaps pose a barrier for balanced development. Poverty rates in Colombia vary largely across regions, from as high as 59.3 percent in Chocó and 50.7 percent

1 OECD (2014).

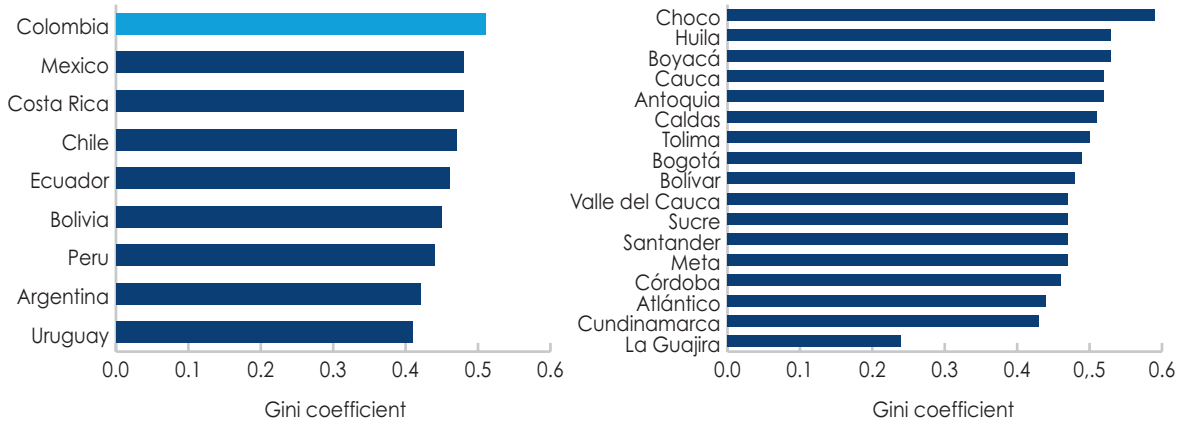
in Cauca to as low as 8 percent in Santander and 7.3 percent in Cundinamarca.[2] Extreme poverty in rural areas is over three times as high as in urban areas, and moderate poverty in rural areas is 50 percent higher than in urban areas.[3] Significant differences persist in access to basic services and land. According to the *Gran Encuesta Integrada de Hogares*[4], the percentage of households in which at least one member is illiterate is more than three times higher in rural areas than in urban areas; only 21 percent of people living in rural areas has finished middle school. In terms of access to water and sanitation, in urban areas 97 out of 100 people have access to drinking water, while in rural areas only 74 out of 100 people have access. Similar patterns exist with respect to sanitation; in urban areas 85.2 percent of households have access to sanitation services, while in rural areas the figure is only 67.9 percent.[5] Regarding land, only 36 percent of rural households have formal title, and in most cases the area is too small to generate enough income to keep the household out of poverty. 70 percent of agricultural production units consist of smallholder-operated farms covering less than 5 hectares (these small units occupy less than 5 percent of the total area), while 0.4 percent of agricultural production units consist of large commercial farms covering more than 500 hectares (these large units occupy 40 percent of the total area).[6] These regional imbalances have persisted for many reasons, including imbalances in public investment for critical infrastructure, the limited physical presence of the government in many isolated regions, the extremely uneven topography of the country that naturally isolates certain areas and perpetuates the persistent lack of connectivity among regions, and the long history of armed conflict that has destroyed physical, human, and social capital especially in rural areas, among others.

Aware of these regional inequalities, and the social, political and economic instability they can create, the Government of Colombia (GoC) has undertaken an ambitious territorial development agenda. With support from many development partners including the World Bank, through the efforts of the *Misión del Sistema de Ciudades,* the *Misión para la Transformación del Campo*, and more recently the *Misión de Crecimiento Verde*, the government has undertaken comprehensive reviews of current trends and key constraints in urban and rural areas. These exercises emphasize the importance of moving beyond the traditional rural-urban classification typically used in planning instruments towards one that recognizes the diversity of places, with the final objective of bridging the gaps in living standards across the regions, i.e. a territorial development approach.

These efforts to adopt a territorial approach have led to important advances. In particular, the *Misión del Sistema de Ciudades* has contributed to: (i) territorial development by defining a new generation of territorial development plans, called "POTs modernos" which are expected to have a greater emphasis on practical measures; be responsive to monitoring and evaluation; include disaster risk-management (DRM); and be updated regularly; (ii) exploiting the potential of urban areas by proposing the development of a methodology to define regional visions for economic growth

2 Moderate Poverty rates for 2016. World Bank staff calculations on several rounds of GEIH, DANE.
3 World Bank staff calculations on several rounds of GEIH, DANE.
4 Gran Encuesta Integrada de Hogares (2015).
5 PNUD (2015).
6 Censo Nacional Agropecuario (2014).

Figure 9.1 Gini coefficient of inequality in Latin America and by department in Colombia



Source: World Development Indicators and DANE, 2015.

in around 18 urban agglomerations identified through the analysis; and (iii) building the data for analysis, by proposing the creation of an urban observatory. As a result of the *Misión del Sistema de Ciudades*, several CONPES[7] documents were signed and approved, one for the mission itself, another one for POTs modernos, a third for the creation of the multipurpose cadaster and a fourth for policies to support sustainable green growth. All the policies defined in these documents are being taken forward by the National Planning Department (DNP) with different degrees of success.

The results from the Misión para la Transformación del Campo provided key inputs to guide the peace agreements signed in 2016. Key policy and institutional changes that resulted from the recommendations of this Misión included the liquidation of INCODER (*Instituto Colombiano de Desarrollo Rural*) and the subsequent creation of the National Land Agency (ANT), the Rural Development Agency (ADR), and the National Agency for Renovation of the Territory (ART) to support rural development. Efforts are under way to develop instruments for designing development programs with a territorial focus (*programas de desarrollo con enfoque territorial*, PDETs). The *Misión de Crecimiento Verde* is still ongoing; its focus includes charting a way to strengthen competitiveness, support sustainability and ensure resilient growth. Its findings and recommendations are informing the discussion on territorial development. In parallel to the work of the missions, the GoC through DNP is working to articulate an overall Territorial Development Policy (*Política General de Ordenamiento Territorial*, PGOT).

The GoC has made considerable progress along the lines of territorial development, but additional efforts are needed to achieve greater and more equally distributed growth in Colombia. Recognizing that the challenges of territorial development cover a broad spectrum of issues and sectors, the scope of this note is limited to key challenges along four cross-cutting sectoral lines: (i) incomplete information systems for decision making; (ii) poor coordination among the institutions responsible for territorial planning; (iii) fragmented programs and incentives for territorial development; and (iv)

7 The *Consejo Nacional de Política Económica y Social* (CONPES) is the GoC's advisor council for social and economic development. The CONPES issues documents to define the GoC's national policies and to validate development projects to be financed internationally.

limited connectivity infrastructure. Considering the work ahead, the next administration's actions should be guided by the following principles: less planning and more implementation, less regulation and more economic incentives, stronger coordination among the already existing plans and tools before creating new ones, and use of technological advances to solve existing problems.

Main Challenges

Territorial development decision-making is not supported by robust information systems

Information used by policy makers for planning, implementing, and evaluating territorial development activities is often unreliable, incomplete and outdated, and sometimes difficult to access. Information deficiencies are common, and the institutional setup to manage information is frequently limited. Each agency usually has its own methodology for data gathering and collects information based on its own standards. Some information is self-reported, which results in low-quality data, and there are significant inconsistencies among the various sources. This information gap has three major consequences for achieving a more balanced territorial development. First, it undermines land-use planning, policy making and implementation of infrastructure investment. Second, it limits government's ability to manage resources such as public land and allocate them to the most appropriate uses, in particular for the much-needed initiatives to promote the productive use of rural land. Thirdly, it restricts the effectiveness of monitoring and evaluating investments, as there is no up-to-date information to measure progress.

An example of the lack of complete, updated information is the current state of the cadaster, with coverage being especially incomplete and inconsistent in rural areas. Today there is no cadastral record for 28 percent of the surface of the Colombian territory, and where information is available, it is usually outdated.[8] Information is not fully systematized, common technical standards for cadastral surveying are non-existent, and cartography lacks the required scale for planning and prioritization of investments in 59 percent of the Colombian territory.[9] In addition, since cadastral data have traditionally been used solely for tax collection purposes[10], important information that could be useful for enhancing tenure security and improving land use planning is limited (e.g., ownership, land use). The lack of reliable cadaster information has prevented a more equitable distribution of land and resources, perpetuating inequality and poverty, and has slowed productivity growth in urban and rural areas.[11] Further, lack of complete information on land ownership, characteristics, and uses, has also limited the ability of municipalities to raise funds through property taxation, which in turn affects their financial health.

The GoC approved a comprehensive and ambitious property cadaster policy. The general objective is to design and implement a multi-purpose cadaster system that is complete, up-to-date, reliable, consistent with the property registry, and integrated with other infor-

8 The municipalities without any cadastral are mostly located in the Departments of Chocó, Amazonas, Vaupés, Guainía y Nariño. These regions include 81 percent of the indigenous territories (*Resguardos Indígenas*), collective property territories, Afro-Descendants, and many of the protected areas of the Country.
9 CONPES 3859 (2016).
10 This explains why around 27 percent of the territory has never been surveyed as many of these plots had little or no expected tax collection.
11 See Policy Note #8 on Peace Consolidation for a detailed analysis of the land administration challenges.

mation systems.[12] Approval of the new cadaster policy marks an important step towards a more equitable territorial development (and the GoC should continue these efforts). However, carrying out a national cadaster is a very ambitious task, especially in Colombia, where there is lack of recent precedent and where institutional reforms will have to be carried out. As such, the GoC has chosen a step-wise approach, has launched seven pilot programs in different regions, and is developing a rollout plan with financing from both the World Bank and the Inter-American Development Bank.

The set of instruments and skills needed to collect, manage, and make effective use of planning information is not met by the skill level and general capacity of many municipalities. This mismatch poses a barrier for effective assignment of resources for territorial development. Subnational governments (SNGs) are required to provide the central government with a complex set of reports on fiscal and budget information, including information about public investment, to receive central government funds, which are channeled mainly through the SGR (*Sistema General de Regalías*). However, low-capacity SNGs are often overwhelmed by the amount of paperwork they must handle, and the systems used to manage these funds are not mutually compatible as the available data are often fragmented, outdated, inconsistent, and non-transparent.[13] Moreover, accountability mechanisms are weak as the central government lacks reliable information on the progress of investments. To that end, the GoC is leading several critical initiatives to improve the quality of fiscal data and statistics at the local level, including most notably the ongoing initiatives to reform accounting and budget systems and to develop an integrated national public investment platform. The latter aims to enhance transparency and efficiency in the use of the investment funds by consolidating, in a common system, mechanisms currently used for managing project investments. Efforts to build a territorial database (Terridata) are well advanced and should be continued.

The lack of comprehensive information systems covering specific sectors limits the efficacy of territorial development plans and exposes local governments to many threats. For example, in the water sector, the lack of a comprehensive water resources management system hinders the attainment of an adequate level of water security; this includes: efficient allocation of water resources and reliable and affordable water services. It also includes appropriately recognizing and mitigating water related risks. In terms of incorporating DRM information into POTs, advances have been made with support from the World Bank, with 56 municipalities having included DRM in their POT formulation. Also, the GoC moved from five to 51 POMCAs[14] including DRM considerations. Efforts need to be continued along these lines given that Colombia has been historically affected by both low-frequency/high-impact events (such as earthquakes, volcanic eruption, and an occasional Atlantic hurricane) and high-frequency but lower impact events (such as floods and landslides). As highlighted in the 2012 Analysis of Disaster Risk Management in Colombia,[15] risks are on the rise more because of improper territorial, sectoral, and private management of resources than because of external factors such as climate change.

12 Colombia Multipurpose Cadaster Project (P162594).
13 See also Policy Note #7 on Subnational Governments.
14 POMCAs are watershed management plans prepared according to a nationally approved guideline (2013).
15 World Bank (2012).

Institutions responsible for territorial planning are not coordinated

Despite many agencies having a key role in territorial planning, overlapping functions often lead to an uncoordinated vision for territorial development. The DNP has played a key role in guiding policy direction and organizing actions for territorial development, in part due to the lack of leadership of other institutions. However, other entities such as the Ministry of Housing (Ministerio de Vivienda, Cuidad y Territorio), have legal mandates for territorial development but limited role in policy development and implementation. As a result, important policies like the PGOT take long time to define and approve. Another example of poor coordination is experienced with land administration. Physical characteristics of land parcels in the cadaster maps and information systems are under the Geographic Institute Agustin Codazzi (IGAC), while information on tenure, ownership and transactions in the property registry are under the Superintendent of Notaries and Registries (SNR). Both systems are considered imprecise and not fully linked, which limits the efficiency and reliability of property transactions. These institutional shortcomings lead to several problems for the management of the land resource, such as: (i) potential conflict of interest for IGAC to act as policy body and implementation agency; (ii) lack of a consolidated land-related database that incorporates information from multiple government agencies, resulting in fragmentation, increased costs, and diseconomies of scale; and (iii) lack of clarity over the role of SNGs in terms of updating and financing of cadastral information.

Newly created institutions for territorial development and peace process consolidation need support to fulfil their mandates effectively. The ANT has the mandate to implement the GOC's overarching land policy entitled "*Ordenamiento Social de la Propiedad*'.[16] Fulfilling this mandate is particularly difficult for a recently created institution with a weak presence at the territorial level (only 5 Territorial Offices with less than 10 staff each) and in the initial stages of setting up internal processes and procedures. ANT received between 2016 and 2017 a backlog of approximately 180,000 unresolved land regularization and formalization claims, and additionally, it is also expected to address issues of land tenure informality that encompass 60 percent of Colombia's rural land. ANT is facing this task without updated cadastral information and with the absence of harmonization between the cadaster and registry data. On the other hand, the ADR's main goal is to structure, co-finance and implement rural integrated projects, prioritized according to their impact, and to pursue finance and co-ownership with local public and private stakeholders. This is also a challenging task due to the lag faced by many rural areas. Creating these specialized agencies with clearly defined mandates represents progress, but they will be successful only if they can coordinate effectively with other institutions and government entities to turn their mandates into actions.

Institutions in charge of water resource management need to strengthen coordination to address inefficiencies in the sector and articulate a common vision for future resource use. Water is a crucial resource for the economic, social and environmental development of the country. With close to 50,000 cubic meters of surface runoff per person per year, Colom-

16 The implementation of this policy entails the gradual formalization of rural private property, regularization, titling and administration of public land (*baldíos*), identification and registration of land property of the State, and the administration of agrarian processes (recuperation of improperly acquired public lands, etc.).

bia is technically one of the most water-rich countries in the world.[17] However, pollution, poor spatial planning, inadequate infrastructure, and extreme variability in annual rainfall regularly cause water-related disasters and mismatches between demand and availability, limiting the country's development capacity.[18] There is lack of vertical and horizontal coordination issues to manage and conserve the water resource and mitigate water-related risks. Unclear responsibilities for water resource management and the limited capacity among different institutions prevents the effective mainstreaming of POMCAs in the POTs. Further, a Decree has been issued by the Ministry of Environment and Sustainable Development to establish the National Water Council. This Council should support integration among the various players in the sector, but until now it has not been operational as there is no agreement on how and at which level should the Council operate.

Institutional coordination challenges and low technical capacity at the local level limit effective implementation of planning tools such as POTs modernos and local development plans (PDTs). Despite the existence of a wide variety of planning tools, the complex institutional set-up and the poor capacity of many SNGs frequently limit the ability of these tools to act as enablers for a more integrated territorial development. For example, PDTs are designed at the local level at the beginning of each local electoral mandate and are supposed to be articulated with the National Development Plan. But in practice they are often considered a formality and remain disconnected from other instruments, such as the POTs. The POTs, which are a powerful territorial management instrument, have also faced some issues given that there is a disconnect between rural and urban areas and many SNGs in rural areas do not have the technical capacity to successfully develop these instruments following a strategic approach. For the first generation of POTs, the challenges are well known: only 3 percent of the "first generation" POTs included a territorial approach that combined urban and rural areas into land use and investment plans[19], and POTs for urban areas included detailed spatial plans as well as tools for managing and financing redevelopment, but comparable levels of detail were often missing for rural areas.[20] The GoC has approved a new territorial planning policy using the POTs modernos program. The program is supporting 115 SNGs during an initial phase and is developing a territorial land use methodology with the participation of several national and international think tanks. Despite this progress, important challenges remain, including: (i) limited funds for additional municipalities; (ii) difficulties guaranteeing municipal implementation and monitoring of the POTs in the first 115 municipalities; (iii) difficulties coordinating efforts among DNP, Ministry of Housing, regional autonomous corporations (CARs), and subnational governments; and (iv) uncertain prospects for self-sustainability, as local governments have been slow to assume ownership so as to gradually decrease DNP's role in the process.

Coordination challenges between SNGs and the central government contribute to inefficiencies in planning and investment. Departments are supposed to play a multifaceted role in regional development and public investment; they are expected to be key players for vertical co-ordination between municipalities

17 IDEAM (2014).
18 See also Policy Note #12 on Green Growth.
19 Territorial Development Policy Loan (DPL) (P158520).
20 Ibid.

and the central government, and to perform an institutional and technical role to support municipalities in their investment policy. However, departments, especially those with more limited capacity, face difficulties to integrate and orient sector plans and to guide investments across municipalities. This is partly due to their inability to generate own resources. The *Contratos Plan*[21] have been developed with the goal of fostering cooperation between the three levels of government (national, departmental and municipal) to better co-ordinate investment in a cross-sectoral way. The focus has been on revitalizing lagging regions and on improving road connectivity or service delivery. However, coordination has been challenging, and reaching agreement among multiple territorial entities is time-consuming. As a result, very few *Contratos Plan* haven been signed and none have been fully implemented. Challenges regarding the *Contratos Plan* identified by a DNP assessment carried out in 2014 include: better targeting for spending, reducing the fragmentation of projects, and focusing on projects with a more regional impact. There are also deficiencies in the projects' design, as projects tend to lack sound technical analysis.[22] Further, financing the *Contratos Plan* is still under discussion; a Regional Fund is being created to address funding issues, but several administrative and legal steps remain, and it is not clear what resources would finance such fund.

Programs and investments for territorial development remain fragmented

The structure of the system of transfers might be perpetuating inequalities in the territory. Local governments in Colombia have been playing an increasing role in public investment and delivery of services following the decentralization reforms. Central government transfers, through the *Sistema General de Participaciones* (SGP) are the principal source of revenues for SNGs and mainly target current expenditure (providing basic services such as education, water sanitation). Allocation of these funds does not consider the fiscal capacity of regions to ensure effective distribution, nor does it consider the specificities of certain territories (urban-rural). This is problematic because deep fiscal disparities[23] exist across SNGs in spending needs and management capacities, creating further gaps in the quantity and quality of public goods and services these can provide.[24]

The royalties system is key for financing regional investment, but the disconnect between funds and regional plans, and lack of local capacity, often results in fragmentation of investments. The central government has used royalties from extractive industries to promote equitable regional development, yet the effectiveness of this strategy has been limited because of low local technical capacity of SNGs for conceptualizing and implementing projects. Many SNGs, especially in remote communities, are not able to take full advantage of the funds they receive, because they lack the capacity to manage projects and coordinate with other communities to ensure proper execution. Projects funded

21 A *Contrato Plan* is a formal and signed memorandum of understanding between the different government levels of a department or region that includes an agreed medium-term program of investments for territorial development to be co-financed by the GoC and local governments involved, as well as other actors like the private sector.
22 OECD (2016).
23 Martinez-Vazquez and Searle (2007). Horizontal inequalities refer to the gaps that arise in the differences between expenditure needs and fiscal capacity in the jurisdictions.
24 See also Policy Note #7 on Subnational Governments.

by royalties are usually small, and they tend to be geographically isolated: as of October 2015, only 5 percent of projects approved for royalty-funding had a regional dimension.[25] The small size and wide dispersion of these projects stems from the fact that local governments do not prioritize large infrastructure projects, which tend to have higher social returns. As a result, the SGR is not achieving its objectives; even though revenues from royalty payments increased by 42 percent between 2009 and 2012 (1.4 percent of GDP in 2012), this has not brought about a reduction in rates of poverty or inequality in lagging regions (Figure 9.1).[26]

The weak revenue collection capacity of many SNGs poses a threat to the sustainability of local investments. Almost 3 out of 4 municipalities (72 percent) currently receive more than one-half of their resources through transfers and one out of 10 municipalities (10 percent) receives more than 75 percent of total resources through the *Sistema General de Participaciones* (SGP).[27] The heavy reliance on fiscal transfers means that many municipalities have low capacity for revenue-raising; on average municipalities collect only 34.6 percent of their estimated revenue potential.[28] Poor revenue collection can be attributed to the lack of regional fiscal and land information, the absence of institutional coordination within government to execute funds, and weak public procurement policies. In this context, both the World Bank and the OECD have consistently highlighted the importance of establishing incentives and providing support to enhance tax collection at SNG level, as well as improving the performance of municipal property tax collection by updating cadastral and land values.[29]

Financiera de Desarrollo Territorial (FINDETER) has led important efforts to support the development of quality infrastructure at regional level, yet challenges remain. FINDETER has facilitated decentralization by providing loans to local governments to finance infrastructure and by providing technical assistance. FINDETER has developed capacity to act as a specialized financial intermediary, but it still faces the following constraints when seeking to finance territorial development activities: (i) FINDETER works mostly with urban municipalities that have solid financial standing, but tends to leave behind rural municipalities that do not, perpetuating problems of unequal development; (ii) FINDETER lends mostly to municipalities and not so often to regional entities, constraining the incentives for small municipalities to work together; (iii) FINDETER's main sources of funding are bilateral and multilateral banks, which frequently require lengthy and complex disbursement procedures; and (iv) FINDETER's menu of financial products remains narrow for the vast necessities of the different entities.

Weaknesses in connectivity exist within cities, within regions, and between cities and regions

Intra-city connectivity is weak in some areas, limiting urban mobility. For territorial development to be balanced, places must be connected, so that people can reach jobs easily and firms can have access to markets. This is true also within a single city. Good accessibility in cities is regarded as a catalyst for higher productivity, greater access to economic opportunities, and social inclusion. As such, Colombia has taken important steps over the past

25 DNP (2016).
26 Bonet and Galvis (2016).
27 Terridata (2016).
28 Ibid.
29 World Bank (2014).

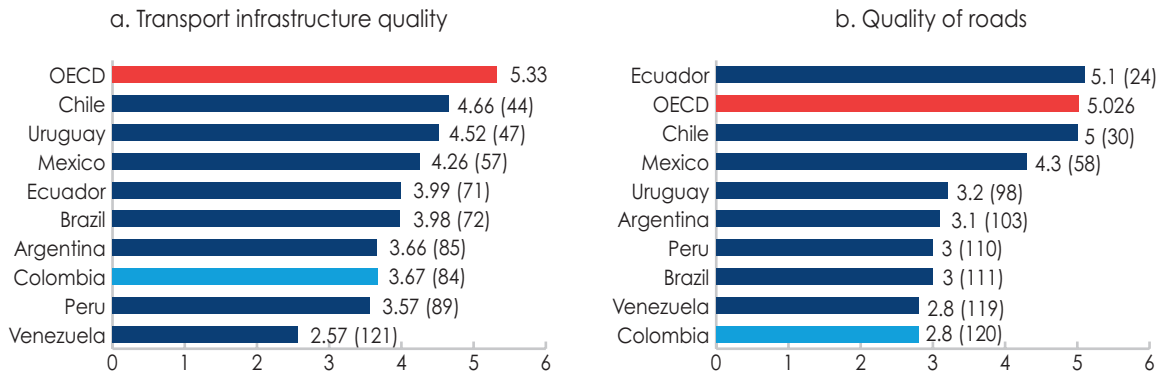
two decades to improve urban accessibility and gradually replace traditional public transit systems with more modern, safe and clean ones that offer a higher level of service through the implementation of the National Urban Transport Program NUTP. The implementation of the NUTP has been successful in improving accessibility in cities like Bogotá (Transmilenio BRT System). But the implementation of integrated transport systems (SITP) has been difficult in Bogotá and other, medium-sized cities. Issues include: (i) faulty conceptual designs and demand estimates (especially for the increase of private vehicles (cars and motorcycles) that might have overestimated infrastructure and operational investments, and thus impacted financial equilibrium of private sector participation (concessions arrangements); (ii) operational designs and service plans that are not offering clear improvements for users (longer travel times, increased transfers, decreased comfort), and as a result are fostering informality and illegal transport as an alternative for users; (iii) dire financial situation, due to poor structuring of bus operator concession contracts and overloading of tariffs with capex costs, that further impact and restrict service plans; (iv) weak institutional capacity at the local level, and difficultly attracting technical expertise to manage these systems; and (v) unclear incentives that always favor additional infrastructure over operation and good operation and maintenance.

Colombia's limited road network has hampered connectivity across major urban areas. Colombia has embarked on a set of comprehensive reforms expected to mobilize more private sector resources and skills for public transport projects with the objective of increasing the national road network and improving Colombia´s logistics performance. Despite the great effort made in the last years to improve the main road network through the PPP 4G program, with the construction of four-lane highways increasing from 2,628 km in 2006 to 10,155 km in 2016, the intercity connectivity is some regions is still unsatisfactory. Colombia's infrastructure gap by transport mode has the largest deficiency in road infrastructure, where Colombia ranks 120 out of 138 in 2016 and 2017 World Economic Forum (WEF) infrastructure index (Figure 9.2).

The limited road infrastructure, partly due to the country's mountainous terrain, has isolated many rural areas and affected agricultural productivity. Low road density is most prevalent around hard-to-access rural areas, which have been among the most affected by the armed conflict. Towns with a high incidence of armed conflict have an average of three times fewer tertiary roads than other towns.[30] Low accessibility levels limit peoples' access to economic opportunities and public services like education, housing, and welfare, yet it also affects agricultural productivity. For example, Casanare, the nation's largest rice producing area, has potential to produce biofuels from corn and palm oil. However, it takes 18 hours to reach Bogotá and 50 hours to access a main port.[31] As such, lack of connectivity reduces opportunities to attract private investment in sectors such as agribusiness, and in priority regions such as Orinoquia. Many studies have documented how remoteness and lack of connectivity to markets undermines profitability and discourages agricultural production. Recent work done in the remote Altillanura region shows that competitiveness in international markets for many cereals and oilseeds is undermined by high transport and logistics

30 OECD (2016).
31 World Bank (2009).

Figure 9.2 Road infrastructure in Colombia



Source: World Economic Forum 2016-2017.

costs that inflate the prices of key inputs like fertilizers.

Poor financing and limited local capacity have slowed progress in road development. In terms of road financing, the road network, particularly those assets under public sector management, has been subject to inflexible and volatile budget allocations, which has impeded a long-term maintenance strategy. The situation is particularly acute at the SNG level, due to the lack of technical, institutional and financial capabilities. Moreover, the Infrastructure Law, enacted at the end of 2013, is meant to tackle some of the most pressing transport infrastructure bottlenecks that have historically led to cost-overruns and delays in transport projects. It calls for the creation of two important agencies in the transport sector: The Transport Regulatory Commission and the Transport Planning Unit, however both entities have not been yet institutionalized.

Recommendations for the management of tertiary roads have not been implemented. The last administrations highlighted the importance of creating a management policy of the tertiary roads as one of the main strategies to support rural development, peace building and equity. In 2016, the CONPES 3857 established policy guidelines for the management of tertiary roads based on five elements: (i) preparing and updating tertiary network inventories to standardize and systematize supply and demand information; (ii) introducing a practical methodology for municipalities to prioritize road sections based on spatial, social, and economic criteria; (iii) developing technical, economic and environmentally sustainable solutions for the construction of tertiary roads that allows updates to current regulations; (iv) creating co-financing criteria that include elements such as the development environment, the length of the road network, and certain support bonds that encourage the optimization of investments; and (v) implementing good practices for creating efficient procurement processes by national and territorial entities that are also competitive and transparent. These recommendations have not yet been implemented. Several plans and programs linked to the peace agreements have been launched to improve tertiary roads in municipalities affected by the armed conflict. But these efforts only target 11.6 percent of all rural roads under municipalities' control (100,748 km), and they have not adhered to CONPES 3857 guidelines.

Policy Options

Develop and operationalize a system to support robust decision-making in territorial development

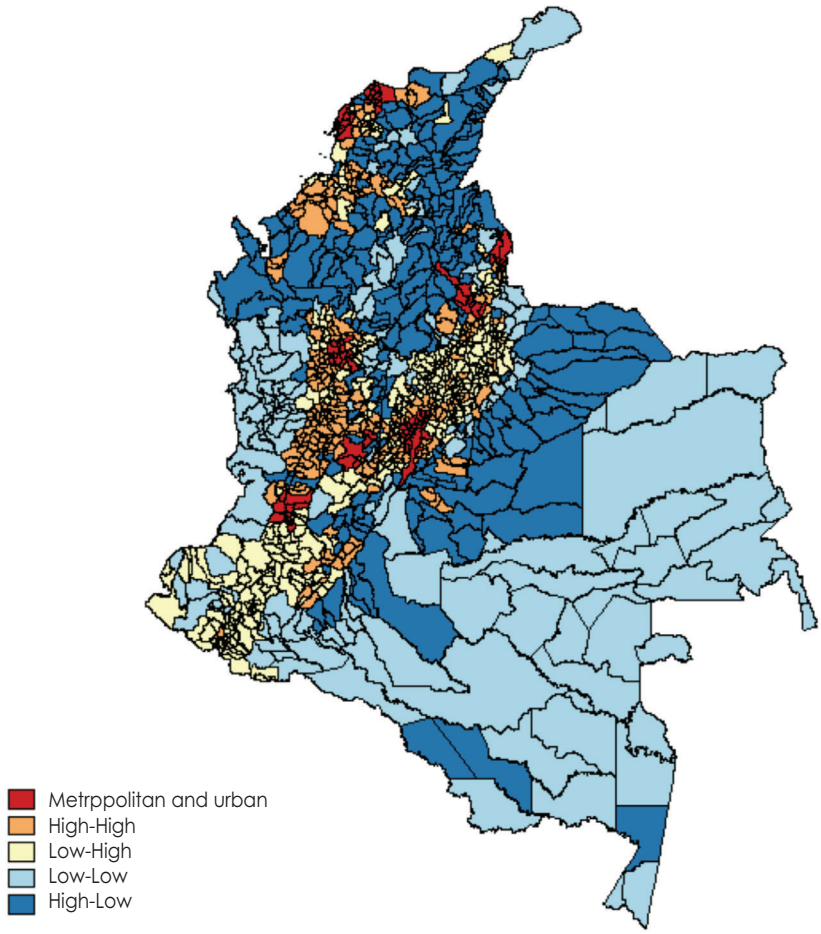
Continue the land administration reform from the previous administration and move forward with the national property cadaster policy. The multi-purpose cadaster policy[32] is part of the ongoing land administration reform and defines the specific objectives for the adoption of the multi-purpose cadaster that will: (i) adequately characterize the physical conditions of the territory under a systematized and standard methodology; (ii) guarantee the full alignment between physical and legal property information; (iii) document and record market-related land values to support property taxation and enable functional land markets; and (iv) incorporate provisions to ensure technical, financial and institutional sustainability in the long term. While the policy is already developed, the next administration's efforts should focus on approval and implementation.[33] Due to the complexity of this endeavor, it will require strong institutional coordination and political support. This moment represents an opportunity to review the complex institutional arrangements for land administration and consider reforms to streamline the institutions. Public awareness campaigns can help citizens understand that property registration is important and needs to be kept current. Additionally, the GoC should continue outsourcing cadaster surveys and other systematic work to the private sector. Systematic formalization and registration across the country will require a massive mobilization of people and resources, which cannot be done by the public sector alone. It is essential to evaluate how the private sector can be mobilized and which key functions should be maintained by the public sector (monitoring, dispute resolution, quality control and standards).

Continue and strengthen Terridata's efforts to collect and standardize local and regional data for policy monitoring and evaluation. Terridata is a DNP initiative that seeks to be the main repository of data at the municipal, departmental and regional levels. This instrument aims to improve information arrangements and move towards better tracking results by collecting standardized and comparable indicators. In order to ensure that this system is sustainable and that municipalities and citizens can use and feed into the system, development of new mechanisms will be needed such as technical capacity at the local level. Long-term sustainability of this initiative could use coordinating mechanisms to involve the private sector, universities, and research centers. This robust information system on local and regional trends can be used to monitor and evaluate programs, guide future investment decisions and increase accountability of resources, including funds channeled through SGR. Further, continuing current efforts to build analytical models that allow examination and evaluation of policies at the regional level (e.g. the regional computational general equilibrium model -CGE at regional scale being developed by the Direccion de Estudios Economicos of DNP) will be key to better assess and inform territorial development policies.

For the water sector, integrate information systems and improve capacity to collect and organize data on regional and local trends. Good

32 CONPES Document 3859 (2016).
33 DPF Territorial Development Policy Loan (P158520).

Figure 9.3 Map of Colombia by type of territories (quadrants) of agricultural activity



Source: RIMISP (2018). *Note*: In the legend the first word represents labor productivity and the second one density of labor.

information systems like SIRH[34] and SIASAR[35] already exist, yet these need to be integrated to improve decision-making. The institutions responsible for these information systems (IDEAM of the Ministry of Environment and Sustainable Development and The Ministry of Housing, City and Territory) must strengthen their capacity to collect and analyze data, and produce information that guides decision-making. Better information would also increase the capacity to encounter illegal use of water and uncontrolled contamination of the resources. It also allows for a better understanding of the status and gaps, to set priorities and to developing investment policies for a more equitable territorial development.

To identify opportunities for closing territorial gaps and improving sectoral competitiveness, review the agricultural sector based on territo-

34 Sistema de Información de Recursos Hídricos – IDEAM.
35 Sistema de Información de Agua y Saneamiento Rural – Ministry of Housing, Cities and Territory under the framework of the National Water and Sanitation investment System (Sistema de Inversiones en Agua Potable y Saneamiento Básico - SINAS)

rial analysis. The agricultural sector in Colombia has been deeply affected by lack of productivity. Yet, recent studies like the ongoing methodology developed by RIMISP[36] can help assess the sector through a territorial lens. This methodology evaluates the interrelation of two variables: capacity of production based on labor productivity and density of labor to reach such production. The interrelation of the two variables offers key information on the agricultural activity of a territory and helps develop a typology of territories according to characteristics of agricultural activity (see Figure 9.3). This type of information can then be used to design policies that can contribute to closing territorial gaps and improving the performance of the agricultural sector.

Strengthen coordination among institutions in charge of territorial development and streamline territorial planning instruments

The institutional setup that guides the territorial development agenda needs to be clearly defined and articulated. The GoC should give an institution the directive to guide and coordinate entities and plans for territorial development, which will ensure the successful definition and implementation of the Territorial and Land Use Planning General Policy (PGOT). Further, the roles of key institutions for territorial planning need to be clearly articulated and acknowledged by all relevant entities to avoid duplication of function and ensure more integrated investment programs and projects.

To strengthen ANT's capacity at national and subnational level to provide land tenure services throughout the country in an effective manner. This includes: (i) designing ANT's operational model at the national and territorial levels, considering ethnic territories; (ii) developing standardized procedures for systematic land tenure formalization "*Ordenamiento Social de la Propiedad*", devising community participation strategies and campaigns; (iii) ensuring land tenure formalization services incorporate environmental considerations to avoid deforestation or any other natural ecosystem transformation (in line with the current Colombian legal framework Decreto Ley 902/2017); (iv) strengthening the ICT infrastructure to support land tenure formalization services in compliance with policies and standards of quality and interoperability with cadaster and registry data; and (v) digitalization of paper records of historical agrarian and land titling processes.

For the water sector, the operationalization of the National Water Council (Decree 585, April 4, 2017, Ministry of Environment and Sustainable Development) is key. This is an efficient and effective way to improve horizontal and vertical coordination in the water sector and develop a shared vision on the value of water for society, the environment and the economy. The council should also be supported by a strong inter-ministerial secretariat to prepare the agenda and to make available the information needed to support discussions on water management. For the council to be relevant it needs the participation and support of key ministries. For example, in Mexico, a federal level agency – the National Water Commission – was created with a strong mandate to lead and coordinated water resource management. Any use of national water resource (both abstraction and discharge) requires a permit from CONAGUA.[37]

36 RIMISP (2018).
37 CONAGUA, OECD and IMTA (2010).

To strengthen the POTs modernos, provide economic incentives and continue with technical capacity to improve performance of SNGs. As part of the current efforts with the POTs Modernos, DNP should seek ways of gradually decreasing its role by building local capacity and providing incentives for local governments to assume ownership of territorial development activities. Further, stronger alignment between PDTs and POTs could significantly help improve the investment prioritization and allocation of resources. Incentives for better integration of plans and coordination among entities are used in several countries. For example, France and Italy have put in place specific financial incentives, such as higher central government transfers, to promote cooperation.[38]

Use of *Contratos Plan* as a tool for departments to have a stronger role in promoting cooperation for investment projects with a regional focus. The *Contratos Plan* can be used as a tool to reach agreement for medium-term investments at regional level, to promote cooperation, and find effective funding mechanisms. This is a key instrument to develop powerful positive incentives for the evolution of subnational level entities' performance, such as to promote departmental and municipal cooperation and strengthen the capacities to develop long-term development strategies. Incentives could be set for contract enforcement. For example, allocating part of the funding based on good performance (performance reserve, on the model of Italy or the European Union); and part of the funding could be dedicated to projects with a regional impact.[39] To do so, the timing of these contracts, which for the moment varies greatly, should be standardized to facilitate monitoring and capacity building. *Contratos Plan* also need to be better articulated with PDTs. Further, establishing monitoring mechanisms to evaluate and learn from regional cooperation experiences as they are implemented will be essential for the long-term success of these efforts.

Develop a portfolio of programs, incentives, and investments adapted to the differential needs of territories and based on practical considerations

Implementing the Territorial and Land Use Planning General Policy (PGOT) must be a priority for the next administration, emphasizing the concept of a *portfolio of places* where public investment will be driven by practical considerations. This means differentiated policies along broad distinctions of territories according to function. The final classification is not set in stone and it could draw from the classification put forward by the *Misión del Sistema de Ciudades*, the *Misión para la Transformación del Campo*, and current work done under the POTs Modernos Program. The key issue is to consider differentiated instruments to tackle different challenges. For example:

In rural areas, efforts should focus on identifying competitive/comparative advantages in the various classifications of rural territories so that the ADR can design tailored programs. Colombia needs clear mechanisms for assessing and prioritizing agricultural and agribusiness investments, and these need to be applied systematically. The apuestas *agro-productivas y de competitividad regional*,[40] need to be clearly identified, and any prioritization should

38 OECD (2016).
39 OECD (2016).
40 The *apuestas agro-productivas y de competitividad regional* refer to the internal proposals based on the definition of their productive potential; these entail a series of activities fundamental for the development of the territory. Based on the above, their main needs and shortcomings are identified in order to achieve success in international markets and thus establish actions for their solution. Among the main actions are infrastructure, business management, science

consider: agricultural potential and levels of productive efficiency across regions (micro-regions), and prioritization of investments based on cost/benefit analysis, impacts on poverty reduction, etc. "Crop feasibility" maps by rural planning units (URPAs) represent an important first step toward incorporating productive potential criteria to guide planning processes. It is essential to do more work to understand productive efficiencies and links between agriculture and agribusiness investments with growth and poverty outcomes. This will mean focusing not only on primary production, but considering also the opportunities for accelerating growth and generating jobs all along the value chain, including through advances in transport and logistics, agro-processing, and distribution.[41]

In areas around small cities, connectivity is critical to improve the potential for trade with midsized and large cities and for reducing economic isolation. Policies need to focus on closing the gaps in living standards by prioritizing investments to provide basic, reliable and affordable services, showing presence of the state through social programs, and developing infrastructure and communications to facilitate trade out. The government also needs to provide technical assistance to local governments and a more-explicit incentive framework to improve the efficiency of transfers and to assemble "building blocks" for increased local revenue efforts.

In areas around medium-sized cities, the focus must be on improving investment in infrastructure to support the rise of local economies, such as manufacturing and agribusiness. Improved economic linkages could encourage specialization and increased trade with diversified urban agglomerations and external markets. Better inter-municipal coordination can be achieved by government incentives and this improved coordination can help achieve economies of scale and manage spatial externalities (e.g. landfills, regional water treatment plants, interconnecting roads). Such aggregation could also spark Public-Private Partnerships (PPP) interest for service expansion and professional infrastructure management.[42]

In large metropolitan areas and urban agglomerations, institutions to foster inter-jurisdictional coordination are needed, along with supporting programs of *competencias diferenciadas*, so that better equipped municipalities and large cities can take on more responsibility. Efficiency and productivity here is strongly linked to ability to coordinate land use and strategic and structural investment planning across boundaries. Logistics platforms need to be developed for more-efficient movement of goods and regional investments. Policies to strengthen institutions for metropolitan governance are key to supporting better provision of services. As new responsibilities are decentralized to cities, the role of the national government will be to provide the right incentives to ensure inter-jurisdictional coordination and help build and strengthen local governments' capacities to serve.

Performance-based grants should be used as tool to complement the current process of asymmetric decentralization. This involves a series of incentives to help build basic technical strengths at the municipal level and improve

and technology and institutionality. Among its main potentialities have been the production of fruits and vegetables, forest plantations, oil palm crops, cocoa, rubber, meat and dairy, aquaculture and fishing among others.

41 See also Policy Note #12 on Green Growth for detail on the conditions to scale up adoption of sustainable practices in agricultural production processes.

42 See also Policy Note #11 on Financial Sector.

the use of resources. This system will help train staff on revenue generation, financial management, investment planning, and implementation. It could also provide the right incentives to create and update information required to: strengthen planning systems; coordinate multiple planning instruments; coordinate across sectors and jurisdictions; and improve quality of life. A system of differentiated incentives can respond to the varying needs and capacities of municipalities with different challenges, including urban/rural differences. Differentiated incentives can help build local technical expertise and systems that respond to the needs of a wide range of municipalities.

FINDETER needs to fortify its effort to help achieve more balanced territorial development by lending to a wider variety of SNGs. It is currently playing the role of a broker among commercial banks to mobilize funding for municipalities, and it is doing it well. However, if the GoC is consistent with its policies of reaching a more equitable land use development, FINDETER should have a window dedicated to municipalities that are on more precarious financial footing, that could be supported with technical assistance and financial backing to upgrade infrastructure and services. FINDETER should also develop a set of products to lend and provide more grants to support the *portfolio of places*. This includes providing more lending to departamentos and associations of municipalities and backed up by *Contratos Plan*. The GoC could also consider incorporating the Regional Fund to FINDETER as part of the effort to promote regional investments. Further, moving from an input-based financing model to a results-based model can help simplify its operation.

As more urban municipalities build their capacities for local revenue generation, use LVC and PPPs for infrastructure financing. Despite being available for decades, instruments such as LVC and PPPs are still underutilized in Colombia. Understanding the key constraints to their regular use is important to charting a way that can help address their deficiencies and unlock their potential. An assessment of lessons learned from urban renovation agencies can also shed light on: (i) how PPPs can be better used for urban regeneration; (ii) what issues need to be addressed; and (iii) what an operational model for the future would look like.[43]

Invest in connectivity infrastructure

For greater intra-city mobility and connectivity, the GoC should play a more active role in supporting the development of urban transport through the National Urban Transport Program (NUTP). This includes fostering greater flexibility for the implementation of urban transport infrastructure, supporting greater efficiency in the allocation of resources and a definition of incentives for the cities to achieve better quality of service. Further, international experience suggests that an important role of the GoC in urban transport is to foster a metropolitan approach to urban mobility that is able to address the limitations of urban jurisdictional issues. Brazil's recent 2012 National Mobility Law and India's Urban Transport Policy provide possible examples of succinct policy frameworks of this kind.

Improve investment planning, project structuring and project management capacities at the SNG level to ensure that projects generate impact at the regional level. There is a need to articulate the long-term planning of the natio-

43 See also Policy Note #10 on Private Financing of Public Infrastructure, which reviews the lessons learned from PPPs in Colombia.

nal road network, with the long-term planning of the regional and local networks. The Ministry of Transport has taken important strides in helping departments with their planning and project structuring capacities with the deployment of the *Plan Vial Departamental* program. Similarly, the government could leverage this program to support municipalities in the definition of competencies and instruments to manage the tertiary road network (collection of statistics, compilation of road inventory, guidelines to manage the network, identification of funding sources, etc.), and in promoting investments that make sense from a regional perspective. The Transport Planning Unit should also become the coordinating body for multimodal transport and the integral planning of the sector at the subnational level to articulate the long-term planning of the road network at all levels. The goal is to prioritize structure and implement projects at the subnational level that have regional or national impact, as opposed to fragmented and atomized public investments.

Define a resource framework for the stable financing of the road sector under public management, and continue with private sector participation through toll road concessions in high traffic corridors. Hence, developing a sound and stable resource framework that identifies the sources of funding for the transport sector, including excise taxes, user charges, municipal finance, makes sense for sustainability reasons, and from the perspective of internalizing transport sector externalities. Furthermore, to lessen the maintenance backlog, and build long-term maintenance strategies that are not subject to inflexible fiscal constraints, the government could consider structuring a program to introduce performance based contracts for rehabilitation and maintenance of the national road network under public domain. This strategy could also be assessed for the secondary (and even tertiary) network.

Implement the recommendations of CONPES 3857[44] for the management of tertiary roads. Following the Peace Agreement, the government initiated the implementation of an investment in the areas most affected by the armed conflict. From this exercise, which covers around 12 percent of the tertiary road network and where innovative sources of funding have been identified, it is recommended to follow up on the goals and challenges in order to identify lessons learned and make a national tertiary roads program more sustainable.

44 Recommendations include: (i) preparing and updating tertiary network inventories to standardize and systematize supply and demand information; (ii) introducing a practical methodology for municipalities to prioritize road sections based on spatial, social, and economic criteria; (iii) developing technical, economic and environmentally sustainable solutions for the construction of tertiary roads that allows updates to current regulations; (iv) creating co-financing criteria that include elements such as the development environment, the length of the road network, and certain support bonds that encourage the optimization of investments; and (v) implementing good practices for creating efficient procurement processes by national and territorial entities that are also competitive and transparent.

Annex 9.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Develop and operationalize a system to support robust decision-making in territorial development	• Continue the land administration reform from the previous administration and move forward with the national property cadaster policy. • Continue and strengthen Terridata's efforts to collect and standardize local and regional data for policy monitoring and evaluation. • For the water sector, integrate information systems and improve capacity to collect and organize data on regional and local trends.	• Review the policies in the agricultural sector based on territorial analysis to identify opportunities for closing territorial gaps and improving sectoral competitiveness.
2. Strengthen coordination among institutions in charge of territorial development and streamline territorial planning instruments	• Clearly define the institutional setup that guides the territorial development agenda. • For the water sector, operationalize the National Water Council.	• Strengthen ANT's capacity at national and subnational level to provide land tenure services throughout the country in an effective manner. • Provide economic incentives to strengthen the POT modernos, and continue with technical capacity to improve performance of SNGs. • Use of Contratos Plan as a tool for departments to have a stronger role in promoting cooperation for investment projects with a regional focus.
3. Develop a portfolio of programs, incentives, and investments adapted to the differential needs of territories and based on practical considerations	• Implementing the Territorial and Land Use Planning General Policy (PGOT) must be a priority for the next administration, emphasizing the concept of a *portfolio of places* where public investment will be driven by practical considerations	• Use performance-based grants as a tool to complement the current process of asymmetric decentralization • As more urban municipalities build their capacities for local revenue generation, use LVC and PPPs for infrastructure financing • Strengthen FINDETER' s efforts to achieve more balanced territorial development by lending to a wider variety of SNGs.

Annex 9.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
4. Invest in connectivity infrastructure		• Give national government a more active role in supporting the development of urban transport through the National Urban Transport Program (NUTP) • Define a resource framework for the stable financing of the road sector under public management, and continue with private sector participation through toll road concessions in high traffic corridors • Improve investment planning and project management capacities at the SNG level to ensure that projects generate impacts at the regional level • Implement the recommendations of CONPES for the management of tertiary roads

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NOTE 10

PRIVATE FINANCING OF PUBLIC INFRASTRUCTURE

Colombia has been very successful in structuring and launching one of the largest toll road programs in EMEs, accounting for around 7 percent of GDP. Challenges ahead are twofold. The first is replicating similar programs in other infrastructure sectors that are critical for economic growth, particularly after the Peace Agreements. The second challenge is to continue the process of mobilizing private sector investment at the lowest possible cost from domestic and international sources. Available liquidity from domestic banks is limited, so mobilizing other sources of financing, such as domestic capital from long-term institutional investors, or foreign capital from international banks and institutional investors, will be essential.

Context and Reform Progress

Infrastructure plays a critical role as an engine of sustainable development. It fosters economic growth, enhances competitiveness and job creation, and facilitates the transition to higher income levels. Colombia's ambition to continue growing under a more sustainable and socially-inclusive model, particularly after the Peace Agreements, requires an articulated effort to reduce the infrastructure gap by 2037, currently estimated at US$339 billion; investment needs for this are 3-4 percent of GDP per year.[1]

Colombia needs to develop a strategy to ensure that financing the infrastructure gap: is fiscally sustainable; ensures efficient delivery and quality of service; and is priced competitively. This strategy needs to define sectors and projects which would be more effectively financed by the private sector; it also needs to identify policies in specific economic sectors and in the financial sector to help drive this strategy. The 4G toll road program currently under implementation could provide valuable lessons that are relevant for other sectors in this context. The infrastructure program should continue with the fiscal prudence standards that have been followed so far, in terms of proper accounting and provisioning of contingent liabilities.

The Public Private Partnership framework: Key challenges and lessons learned from the 4G Program

1 Estimate from the G20 Investment Hub including energy, transport, water and telecoms investments necessary to sustain projected growth rates.

Lessons learned from the 4G process and current challenges in the program's implementation provide important guidelines for the next generation of infrastructure projects in Colombia. The 4G program was the most ambitious infrastructure program to be executed in Latin America in the past few decades, and will eventually alter the social and economic landscape of the country. Below are some key lessons from the program that help delineate the challenges faced by Colombia in infrastructure finance with important insights for the next phase of the 4G Program and for new sectors and projects under consideration.

Establishing Leadership Institutions

A critical challenge is to consolidate independent, decision-making entities who have clear roles in project structuring and contract administration. With most 4G projects already awarded it is important to ensure that there is a leading government agency in charge of monitoring contract administration and enforcement. The roles of *Agencia Nacional de Infraestructura* (ANI) and *Financiera de Desarrollo Nacional* (FDN) in the 4G Program and in other infrastructure projects point to a division of labor between the two entities that would need to be reinforced.

The role of *Agencia Nacional de Infraestructura* (ANI): The Government of Colombia (GoC) created the ANI as a decentralized and a financially and technically independent state agency responsible for implementing the national infrastructure program. ANI built a strong management team, which was drawn from the private sector and given the necessary empowerment and political capital. ANI also painstakingly vetted the program with the local and international stakeholder community, including dozens of public hearings and question-and-answer sessions. The result is a framework that is more bankable and representative of international best practices vis-à-vis the first drafts that were issued to the market for review and consultation. The next challenge for ANI should be to redouble its efforts in contract administration and regulation, leaving early-stage work, structuring and advisory to FDN as set out below.

The role of *Financiera Nacional de Desarrollo* (FDN): To complement ANI's role above, FDN has matured into the primary structuring agent for infrastructure projects at a national scale in Colombia. It is also the structuring agent for projects in sub-national jurisdictions as well as in emerging PPP sectors such as mass transit, hospitals, educational facilities, etc. As a case in point, FDN is leading the structuring of nine projects with total projects costs of over US$8 billion, including the first line of the Bogota Metro for an estimated US$4.6 billion in investment. FDN should continue to strengthen its role as the key structuring agent for national scale infrastructure, complementing their resources with more staff, expertise and technical assistance funds from third parties.

FDN should also continue to strengthen its portfolio of innovative financial products that can increase bankability and allow more projects to reach financial closing, including in the capital markets. FDN was present in virtually all financial closings either as a senior lender, subordinated lender and/or partial risk guarantor in the 4G program. The success of the financial closings in the 4G is in large part a result of the flexibility and innovation of FDN's products team. This is particularly true for the two benchmark capital markets issuances for the Pacifico 3 and Costera transactions, where the sponsors and their advisors partnered with FDN to create the necessary bankability profile to attract offshore investors through 144a/Reg S issuances. Building upon this success, FDN

should strengthen its role as upstream structuring agent as well as downstream financial solutions provider.

Leadership in Other Sectors: As the GoC looks to expand private sector operations in other sectors such as energy and water, the process will be distinct from the 4G, but some lessons will be valid nonetheless. As the administrator of the 4G, ANI has a role to play with regards to lessons learned and best practices in contract administration and management. The energy and renewables and water sectors are decentralized and supported by established municipal and regional entities that will take the lead in implementing investment programs, so ANI's role will be minimal.

FDN on the other hand has the structuring and financial expertise to support initiatives in diverse sectors and should provide valuable structuring advice and innovative structural products, some of this work is already underway. FDN will need more resources and staff to manage this expanding mandate, but the structuring and financial capacities of FDN (developed through the 4G) should prove invaluable as Colombia seeks to expand its private investment in infrastructure across sectors, across geographies and at the national and sub-national levels.

Planning for "sector programs" of bankable projects

A key driver in bankability and efficiency of infrastructure finance is being able to develop a critical mass of similar projects. Developing a pipeline of bankable and fiscally sustainable projects with fair risk allocation among stakeholders is a key element for attracting long-term institutional investors and foreign capital. The scale of the 4G program in terms of overall volume and the number of projects was very important to attract the interest of domestic and international sponsors and financiers.

Sectors with higher chances of success of PPPs, are those where a pipeline of projects can be developed by adopting similar contracts and financial structures. This brings economies of scale to the public sector and to private sector sponsors and financiers; it is also expected to reduce their transaction costs. Moreover, programs that include a series of projects with similar transaction structures, and that are well promoted, are much better positioned to attract the attention of international sponsors. Engaging in one of these programs is more attractive for companies who do not have a physical presence in the local market and need to open new offices and allocate substantial resources to a new country. It would also make an attractive investment proposition for long-term investors like pension funds and insurance companies. Long-term investors, in Colombia and internationally, benefit from certainty on the pipeline of potential investments, and from a certain degree of standardization of assets.

In Colombia the sectors with the strongest potential for mobilizing private sector financing are renewable energy, social infrastructure and transport. The GoC has recognized the importance of environmental sustainability and has embraced a Green Growth Strategy for promoting sustainable economic development and competitiveness. Natural disasters and climate change are expected to impose significant economic and social costs in the coming years; it is therefore important to reduce vulnerabilities to the impacts of climate change, as these are increasingly affecting the poor. Given Colombia's target for greenhouse gas emissions (GHG) reductions, the deployment of clean energy projects (renewable energy and energy efficiency) will play a

central role in achieving this target.[2] However, there are several measures that need to be considered to attract private investment and scale up the clean energy market. One key measure to attract private investment to the sector is having proper Power Purchase Agreement (PPA) regulations in line with best international practices. Concerning healthcare services, most of the people (including the most vulnerable sector) rely on the network of public hospitals, which are concentrated in the north of the city, with an important deficit in the south and west. Moreover, most of these hospitals do not comply with earthquake regulation standards. The GoC is leading an initiative to improve Bogota Public Health System with a pipeline of 5 new public hospitals, for which new ways of financing will be need and where capital markets can play an important role. The education sector also has the potential to reap large benefits over time, and the ability to absorb the large up-front costs associated with structuring an ambitious program such as the 4G. In the context of the National Education Infrastructure Plan (*Plan Nacional de Infraestructura Educativa*), there is a pipeline of 1,500 school projects, 14 percent of which will be structured as PPPs that will need additional funding sources from the private sector.

Ensuring projects are well-prepared before tender

Colombia has made a significant improvement in several elements of its PPP framework since the approval of its PPP law in 2012. It has obtained a high score in the "Procuring Infrastructure PPPs 2018" report published by the World Bank.[3] It ranks 5th out of 135 countries in the preparation of PPPs indicator and 1st in the unsolicited proposals indicator between countries that contemplate this option. However, there are still several aspects of the project preparation process that could be improved.

With some exceptions, speed has often taken precedence over quality in project preparation with several unintended negative consequences. Some projects have been rushed through early development stages to meet politically-determined deadlines. This has resulted in tendered projects that are either poorly structured or contain unresolved issues, such as land expropriations or an inaccurate risk assessment. This weakens the vetting process on project fundamentals and could lead to unintended consequences including: early cancellations, disputes, renegotiations and even terminated projects. All these factors can question the credibility of strategic PPP programs or increase the cost to the government.

Quality of project preparation requires strong in-house capacity in PPP units and in line ministries; it also requires experience from public and private infrastructure markets. This needs to be complemented by investing in well-qualified advisors to produce solid commercial, technical, legal and environmental, and social inputs. It is also imperative that government advisory teams have reasonable implementation timelines so that the technical inputs can be appropriately evaluated, designed, assimilated, discussed (including with the private sector) and completed.

Many regional governments have laid the groundwork for concession and PPP programs. Legal and regulatory frameworks have been designed to channel more private investment into the transport sector. This groundwork means that governments are faced with the

2 See also Policy Note #12 Green Growth where these climate change targets are covered in detail.
3 World Bank (2018).

longer-term task of producing pipelines of bankable projects year-after-year to address the mediocre performance of the infrastructure sector and the daunting gap in investment. Progress on these fronts hinges on institutional capacity and the ability of PPP authorities to perform better at: prioritizing, planning, appraising, vetting and, ultimately, structuring projects that are attractive to private sector investors.

The concession agreement

Structural gaps in the concession agreement of the 4G Program explain the high demand for FDN risk enhancement. FDN has been very effective in bridging these gaps with its different liquidity facilities. However, if these structural gaps in the concession could be remedied, FDN could be even more effective in its catalytic role in providing liquidity. It could also provide credit enhancement products that could bring even more participation from local and international capital markets where the cost of funding is least expensive.

A bankable concession or a PPP program that is suitable for private sector investment needs to take the specific risk appetites of different financiers into consideration. Globally, governments are de-risking the revenue streams in road and public transportation PPPs by using availability payments, minimum revenue guarantees and other bankable solutions. Governments seeking to introduce unmitigated traffic and revenue risk will find fewer debt and equity participants, including capital markets investors that have no appetite for these risks. As a reference for other sectors, an important high-level bankability features of the 4G was that the concession divided the revenue stream into two currencies: US dollars and Colombian pesos. ANI-backed flows encouraged the participation of onshore and offshore debt and equity participants. This structure reached an interesting balance between providing guaranteed revenue streams to the financiers, while incentivizing concessionaires to operate and maintain quality through a system of capped performance deductions assessed by independent third-party auditors, over the life of the concession.

Early termination is one of the most critical bankability elements that affect the overall appetite for the PPP program, especially from capital market participants. If the goal is to optimize appetite from private sector financial markets, early termination payments should cover the senior debt (including interest rate hedge close-out costs) in all circumstances, and the payment should be made within 12-18 months. If the government's intention is to cover the debt, it should be clear to financiers. If the aim is to attract strategic and institutional equity investors, it is important to recognize all investments that are undertaken, including make-whole provisions and contractor de-mobilization when appropriate.

Rationalize the bidding process

Pressure to move quickly and to "democratize" the bidding process by inviting an audience that is too broad, can have unintended consequences. Selected bidders may be unqualified or may be unable to comply with the technical and economic criteria needed for large-scale infrastructure projects. In the case of the 4G program, the "lottery" system was used to limit the bid list to ten (10) prequalified groups, which meant that many participants were not able to submit bids after long and expensive due diligence work. This is sub-optimal from an individual project perspective, but also detrimental to securing sustained long-term interest in national infrastructure programs, especially from international bidders.

Optimizing the number of projects and their sequencing is key for governments that are often under severe pressure to produce large numbers of projects in a short space of time. In the case of the 4G, ANI overwhelmed the market with too many projects at once. This can create chaos or, at best, reduce the efficiency of the project finance market, affecting financial advisors, commercial and investment banks and bond and insurance product providers.

Timing, project quality and project coordination have a strong impact on the programs, and international bidders tend to shy away from early stage bids according to a "wait and see" strategy. This reduces competition and can often leave local bidders with more projects than they can sustainably finance and execute. Financing can also be very expensive unless there is an ample amount of competitive local and international financing available to finance the PPP on a currency-matched basis. The first wave of 4G was dominated by Colombian firms, which in some cases were the only bidders to present final offers; and as there were too many projects seeking financing from too few financiers, the cost of financing ended up being very high. The banks did not get competitive until capital markets financing by the Mario Huertas Group reached financial closing and introduced stronger competition.

Optimize competition

Colombia is a clear example of the benefits of competition for lowering the cost of financing PPP programs. The main challenges to private financing of infrastructure in Colombia include: the dominance of a few large economic and financial conglomerates; the lack of a domestic track-record in project finance for PPPs; the lack of experienced and well capitalized infrastructure operators; the existence of small construction companies that take the role of infrastructure operators. In this context, competition is the most effective way to optimize value for money for the government and to ensure constituents that the most efficient economic proposal has been selected for a PPP project. Competition is required at all levels of project financiers: sponsors, lenders and capital markets participants. Some key lessons can be drawn from the recent 4G program on how to be more effective in creating competitive markets.

The benefits of standardization

ANI has been successful in standardizing concession contracts for 4G projects, even if this has contributed to slower implementation. As noted above, the openness of the consultation process for the Concession Agreement managed to create a rigorous debate among developers, investors, legal advisors, investment banks, commercial banks and multilaterals. ANI engaged early with this "pool of expertise", and these same players have become pilot participants in the 4G itself. The contract format could have been simpler, but the result of this process was a standard concession document that was far more bankable than earlier versions.

Having a single concession document that can be used for all projects has cut down on due diligence expense and has incentivized bidders to present offers to multiple projects. International participants operate on the premise of "relative opportunity" and they tend to focus their efforts where there is the greatest likelihood of potential projects and the most efficient use of staffing and due diligence resources to present multiple business opportunities. Although international bidders' and commercial banks' appetite did not materialize until later in the 4G process (second wave), several developers presented multiple offers

and international financiers funded several 4G undertakings.

Main Challenges

Challenges for a reliable PPP financial ecosystem

The scale of the 4G Toll Road Program has absorbed a large share of domestic banks' liquidity. Mobilizing other sources of financing, such as domestic capital from long-term institutional investors, or foreign capital from international banks and institutional investors, is essential. Each source of financing presents its own challenges which the government needs to address.

Balanced risk allocation to crowd-in capital markets investors

A challenge for the GoC is to adopt a more demand-driven approach to bankability that responds to the risk appetite of debt capital markets. The 4G was an important first step toward introducing capital market investors to the Colombian infrastructure sector. In recent years, governments have structured concessions according to their own risk preferences – often with limited feedback from the private sector. This has left sponsors and lenders to deal with risk allocation that has proven to be challenging and expensive. Institutional investors are highly risk-averse; and long-term, low-risk, stable returns are a pre-requisite for commitment. When governments allocate high levels of risk to the private sector under concessions, including foreign exchange, demand, construction and early termination risks, interest from institutional sources rarely materializes. Therefore, an expanded concept of bankability is required and a balanced risk allocation needs to be attained.

Create competition: attracting new players to the infrastructure finance market

Fostering complementarity as well as competition between banks and long-term investors is critical as the banking sector faces more obstacles to providing long term finance. In recent decades, the project finance market in Colombia has been dominated by domestic and (to a minor extent) international commercial banks and DFIs that have provided long-dated, limited-recourse financing. However, lending markets are changing. As commercial lending terms and conditions have become more conservative (including drastically reduced tenors) as a result of expensive capital requirements under Basel III and Basel IV, it is necessary to consider domestic and international capital markets as complementary sources for project debt financing. Commercial banks do not want (or cannot afford) to hold long-term project exposure on their balance sheets, however yield-seeking institutional investors are willing to support the sector if risk allocation can be structured to meet creditworthiness criteria and rating agency thresholds.

The concentrated structure of financial conglomerates is a major drawback to developing competitive infrastructure finance markets, even if institutional investors were to become more active. Additionally, pressures are starting to build in the availability of long-term local currency financing for infrastructure in Colombia, given the size of the 4G Toll Road Program. This can result in a higher cost of financing for new projects. In this context, being able to attract foreign, long-term investors is critical; however, most international investors cannot take on local currency risk. An added difficulty is the fact that most remaining projects, including in the 4G Program, have local currency revenue streams.

The challenge is to create competition for domestic long-term institutional investors from both domestic and international markets. The current investor market structure, dominated by a highly concentrated pension fund sector, restricts competition and liquidity in the securities market. There are also potential conflicts of interest that could impact the objectivity of the asset managers responsible for pension and investment money within the large conglomerates. This situation is even more critical in the case of conglomerates that have a strong presence in the construction business. Some pension funds have high-level officials in their investment committees who have a management role in the banks, as well in the construction business belonging to the same holding company. Besides the obvious conflicts of interest, this situation leads to a sub-optimal allocation of resources, as all financiers in a project show the same investment preferences even though they are supposed to have different risk profiles. There is space to make improvements through changes to be introduced by Superfinanciera as part of implementing the new conglomerates law.

Role of FDN to address market failures and support financing innovations

The GoC created FDN as a development bank responsible for supporting market based solutions for Colombian infrastructure programs. As with ANI, the GoC appointed a leadership with international capital markets experience. FDN's objective was to structure tailored financing and risk mitigation products to support programs such as the 4G. Overall, FDN has been very successful in achieving its objectives. Part of the success is the result of an unusual shareholding structure for a development bank, which includes non-government shareholders (two multilaterals: IFC and CAF; and a private bank: Sumitomo). This has led to the incorporation of private sector governance and management practices. FDN developed its products in a very timely manner based on the needs of the market. Additionally, FDN has had the breadth to manage dozens of potential and actual clients, each asking for tailored financing and risk enhancement, helping projects to reach financial closing. In particular, the capital markets issuances led by Goldman Sachs have been groundbreaking transactions. FDN has also been instrumental in the success of the two key capital markets instruments used in Colombia: project bonds and infrastructure debt funds.

Financial sector regulations supporting financial innovations

On the supply side, Colombia had limited products available in capital markets to provide financing for infrastructure before the implementation of the 4G Program. As the program was implemented, two innovative and successful products were developed: project bonds, and infrastructure debt funds for greenfield projects. Two types on project bonds have been issued: inflation-linked and denominated in local currency; and denominated in US dollars. All project bonds were registered off-shore under the 144 A/RegS issuance regimes, including those denominated in CoP. Two challenges remain for project bonds: registering and issuing bonds in the local market, and broadening the use of bonds so it becomes a more common instrument in both greenfield and brownfield projects. As it relates to infrastructure debt funds, this has been an innovative approach to increasing the exposure of domestic institutional investors to projects with an important construction phase. Three features of infrastructure debt funds should be underscored. The first one, is that they are ideal vehicles to complement bank financing in longer maturities, as they have the same flexibility as a bank

loan. The second is that investors can outsource the infrastructure finance expertise to the funds' manager (General Partner - GP), which effectively makes them operate as a bank on behalf of institutional investors. Third is the very strict governance arrangements developed in Colombia for infrastructure debt funds. These ensure that the interests of the fund manager and the investors are aligned. Key governance features include: a minimum of 10 percent GP co-investment in each project invested by the funds; a 20 percent cap in the debt tranche of any project; long-term tenors to 20 years; and no-disbursement in the fund until the projects require the financing, among others.

On the demand side, investment regulations have been adjusted with positive results but challenges remain. The SFC has been flexible in creating a specific investment bucket that allows pension funds to invest in infrastructure through debt funds, if the exposure is to the 4G program.

However, there are several regulatory barriers that need to be addressed before this can happen. The first one is the formula of minimum profitability, which encourages conservative and herd investment behavior. The second is that all costs of developing innovative investment strategies are borne by the administrator, which discourages innovation. Third is the disparity between the public regime and that of the private AFPs; this constitutes an obstacle to the development of Colombian domestic capital markets on three accounts: (i) they limit product innovation in the market; (ii) they restrict liquidity; and (iii) they are not supportive of competitive price formation.[4] Public pension funds could become an important player in the market provided their investment rules incentivized them to invest long term and to compete for the same instruments as the private pension funds.

The governance and investment frameworks for public and private pension funds could be substantially improved to promote competition and innovation. Defined benefit pension funds could gain from greater rates of return by increasing the maturity and risk profile of investments so that they are matched with their liabilities. This could be done for example by expanding the types of private capital funds where they can invest. In the case of FONPET, the public pension fund, the Colombian capital markets would also benefit from adding a sizable new long-term investor with around US$15 billion of assets under management. Carry out an assessment of the pension funds governance and management frameworks following best practices in similar types of funds (e.g. Canada, USA) would allow greater flexibility in investment policies, while aligning with best practices on prudent investment strategies that match the funds' liabilities and required returns. It would also be good to assess remuneration arrangements for outsourced asset managers of public pension funds, including performance measures and risk management frameworks.

Policy Options

Colombia has made remarkable progress in infrastructure finance, though challenges remain to consolidate its position as an investment destination for long term capital. As described in this note, the effort by leading institutions in the public sector (ANI, FDN, the Ministry of Finance, the SFC) on multiple fronts has managed to place Colombia in the international scene as a model to replicate. There is still room for improvement to become more sustainable and to

4 See also Policy Note #4 on Pensions.

benefit other sectors beyond the 4G, particularly in light of recent corruption scandals. Five policy recommendations are prioritized in this section, drawing on the challenges explained in this note.

First, the new government needs to move quickly to support and strengthen the momentum for private infrastructure finance, consolidating its technical nature beyond the political cycle. The recent corruption scandals, including Odebrecht, and the slow pace of project development have created some skepticism of the 4G program, despite reaching financial closing for several important projects. The new government needs to reassure investors of the stability of the infrastructure finance approach despite the political cycle. An important move, would be to reinforce the technical quality of the project preparation and implementation and its long-term and programmatic approach, considering the shortcomings and lessons learned from the 4G as described in this document.

Second, the GoC should provide clarity about when to use PPPs and when to use traditional procurement and other public sector structures. Within PPPs there are several very different models depending on how risk is allocated between the public and the private sector (e.g. availability payment versus tariff-based models). In recent years, several different types of business models have been used to procure public services without a clear direction, except for the 4G program. This has created uncertainty and an unnecessary waste of resources. PPPs are a proven model of procuring public infrastructure but they are appropriate in all circumstances. PPPs are not suitable for some projects as a result of size (too small or too large) of the project, or because of the nature of the risks. The GoC needs to develop systematic criteria and policies to indicate when different models are to be used. This could provide focus for public and private sectors alike.

Third, provide ANI with more resources to enhance the institutional capacity required to manage and administer projects. The ANI has made a tremendous effort in structuring the 4G program, which has taken most of its resources. Equally important functions include monitoring PPP contracts implementation; ensuring the parties that are involved comply with their obligations and that there is legal certainty over their interpretation. The credibility of the 4G program is at stake if there is not sufficient institutional capacity from ANI on contract monitoring and enforcement.

Fourth, expand the role of FDN as the structuring agent and the local bank capable of having a unique catalytic role in infrastructure finance. National development banks are most powerful when they cover inadequacies in private sector financing rather than providing sub-market funding and/or covering structural gaps in the concession and/or legal framework. If granting authorities can achieve a bankable risk allocation in the concession, FDN should increase its focus on providing market-based funding and credit enhancement products with a special emphasis on attracting international capital markets participants where the cost of financing is lowest.

Fifth, support the different domestic and international channels that would bring competition to infrastructure finance with special emphasis on institutional investors. Colombia is at the forefront of EMEs in channeling institutional investors into infrastructure. Its great advantage is the existence of a sizable private pension fund industry, but this is also its main weakness given its concentration and poor enabling environment for developing competition. The GoC should prioritize policies and regulations

that would allow improved governance and a greater number of players in the institutional investor space. This includes a change in governance and investment regulations for FONPET, as mentioned above; a change in governance and investment rules for domestic AFPs; and an improved enabling environment for foreign institutional investors. The latter is very much linked to the recommendations on stability of the infrastructure framework and the institutional capacity recommendations explained above. As regards FONPET, some suggested changes to the current investment manager selection process would be: first, to select the investment manager on the basis of multiple criteria rather than simply lowest cost, including a broader range of relevant factors such as the quality of its people, investment philosophy, risk management practices, and performance track record. Second, introducing the ability to assign investment managers a specialized mandate rather than the current approach of using multi-asset class mandates. Last but not least, it is also recommended, at least for an initial period, that any publicly traded asset classes in which FONPET invests should be managed passively (e.g. using index funds or exchange traded funds (ETFs)), rather than being actively managed, as this will require less time and attention on the part of the board of FONPET than active management, allowing the board to focus more on asset allocation decisions, which account for most of the return and risk arising from the portfolio.

Annex 10.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Develop PPP programs for sectors	• Develop systematic criteria and policies about when to use PPPs and when to use traditional procurement and other public sector structures • Select sectors with strongest potential for private sector financing, and continue support for reforms in clean energy sector • Reinforce the technical quality of the project preparation and implementation • Support ANI with more resources to enhance institutional capacity to manage and administer projects	• Design programmatic sectorial program of bankable projects: coordination between line ministries, MoF, DNP and subnational entities • Enhance PPP framework for eligible/selected sectors: risk matrix, contract standardization, expropriations, bidding process • Expand the role of FDN as the structuring agent of infrastructure projects
2. Mobilize private sector financing	• Expand the role of FDN as the local bank capable of having a unique catalytic role in infrastructure finance • Review governance of public and private pension funds (under conglomerates law) • Review investment framework on public pension funds (e.g. Fonpet): selection of the investment manager based on multiple criteria, introduction of the ability to assign investment managers a specialized mandate, and passive management of publicly traded asset classes	• Design financial sector regulations supporting financial innovations from the supply (local offering/ registration regimes) and demand side (investment regulations)


SAMSUNG
70% 10:32 AM
IncluirTec
Información Familiar
david Quintero
Número de Identificación:
Parentesco:
Cónyuge
Nombres:
Apellidos:
1
2 ABC
3 DEF
6 MNO
9 WXYZ
#

NOTE 11

FINANCIAL SECTOR

Colombia's financial system has withstood the economic slowdown in recent years, but key challenges remain. Efficient and inclusive financial systems are critical to support productive investments and sustain economic growth. In order to increase the breadth and depth of the Colombian financial sector and correct inefficiencies in the allocation of capital important policy reforms are necessary. Reforms should focus on strengthening the financial regulatory architecture; ensuring adequate levels of financial supervision of conglomerates; and reducing concentration. Moreover, despite notable progress in some segments of domestic capital markets, more needs to be done to increase their size and liquidity, and to encourage product development. Access to finance needs to be expanded by developing financial instruments tailored to un- and under-served segments of society, such as micro, small and medium enterprises (MSMEs); women and rural populations; and people on lower incomes. Improved access to finance will also help the sector catch up with the fast-evolving technological developments.

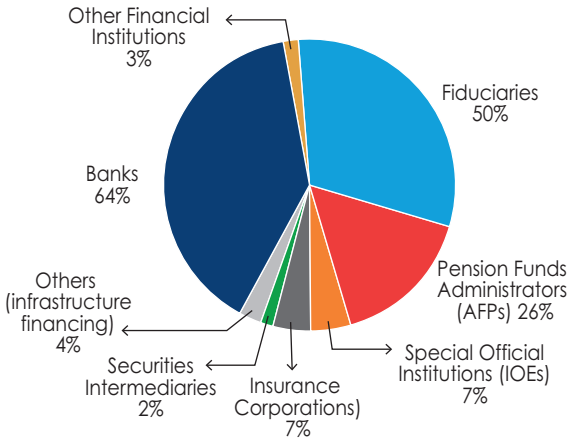
Context and Reform Progress

Colombia has a well-developed financial system with a variety of intermediaries but it is dominated by complex financial conglomerates. Financial system assets rose from about 60 percent of GDP in 2000 to 166 percent of GDP in 2016. Several factors contributed to a rapid growth of financial sector assets, including market liberalization reforms[1]; favorable external factors such as the boom in international trade (1986-2007; the commodity super-cycle as of 2004; and increasing access to international capital markets at affordable conditions since the mid-2000s. Credit institutions (mostly banks) account for nearly 40 percent of total financial system assets, with assets over 64 percent of GDP (Figure 11.1). Over a half of total financial system assets is held by non-banks, out of which fiduciaries (trust companies)[2] and pension fund administrators (AFPs) control 30 and 16 percent

1 These reforms were introduced in the early 1990s to help integrate Colombia into the global economy and expand private sector development

2 Fiduciary companies act as trustees and managers under fiduciary contracts engaged in a variety of financial, commercial and other activities, including funds management (fiduciary contract for administration and payments), managers of collateral (guarantee fiduciary contracts), construction projects (real-estate fiduciary contracts) and investments. As is customary under a fiduciary scheme, the settlor conveys certain assets to the trustee (the fiduciary company) which manages the assets pursuant to the instructions provided by the settlor.

Figure 11.1 Financial sector structure (assets to GDP, 2016)



Source: Own calculations with data from SFC.

respectively (Figure 11.2). The top eight conglomerates hold about 80 percent of total financial sector assets. The top three banks hold about 50 percent of the sector's assets, and this is higher than in Brazil, Chile or Mexico.

Financial intermediation in Colombia has increased in recent years and stands at similar levels to regional peers. Credit to the private sector increased to around 47 percent of GDP in 2016 (mirroring 49 percent for the LAC region) from 33 percent in 2006. Commercial and consumer loans represent more than 90 percent of the total credit portfolio (27 percent and 13 percent of GDP, respectively). Micro and small and medium enterprises (SME) credit is small.

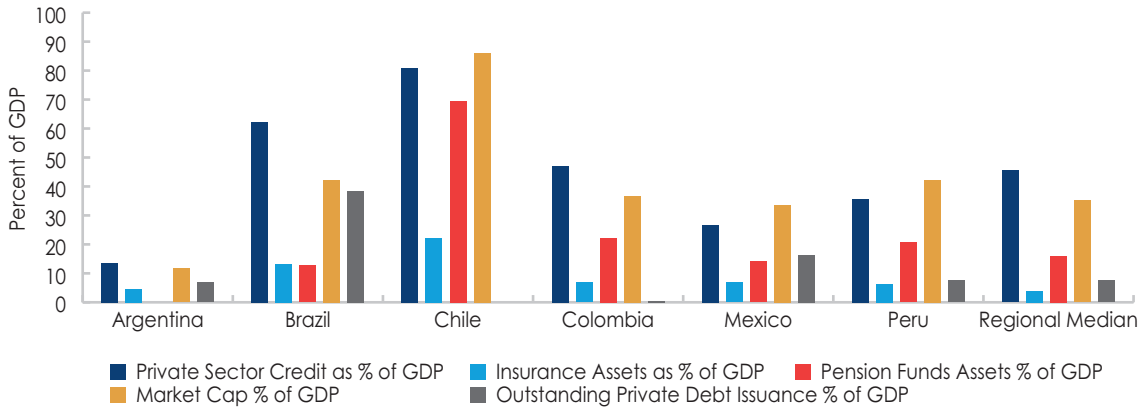
The financial system appears to be sound, well capitalized and is among the most profitable in the region. As of December 2017, capital adequacy (18.6 percent) and tier-1 capital (12.4 percent) were well above the regulatory minimum of 9 percent. Bank profitability remains strong with ROE and ROA at 13.8 and 2.2 percent respectively. Alike, overall net-interest reached 59.2 percent and non-net interest margins reached 43.9 percent. NPLs increased from 2.9 percent in 2015 to 4.2 in 2017. However, NPL provisions remained well above 100 percent. Liquidity buffers appear adequate, although indicators have deteriorated in recent years. Nonetheless, credit institutions had a liquidity coverage ratio (LCR) above the regulatory minimum.

Colombia's banking sector is characterized by elevated levels of concentration in a few banking groups and conglomeration around three dominant economic entities.[3] Banking services are expensive; there are monthly charges on entry-level savings accounts and basic ATM operations (even at a bank's own ATM). Elevated levels of concentration within the banking sector (where a single financial group owns four large banks), the conglomeration in most segments (insurance, brokerage, finance companies) and the duopoly of the AFPs (where one financial group controls 50 percent of assets and the other 37 percent) ultimately hampers competition and financial intermediation (Figure 11.3). It also increases financial costs and creates adverse effects on banking system efficiency and the overall developmental impact of credit.

Central Bank stress tests show that while the financial system seems to be resilient, the real economy faces risks from potential financial sector distress. The Financial Stability Report (FSR) assessed Colombia's impact of a hypothetical severe adverse scenario, involving a major reduction in investment, a decline in consumer confidence and foreign demand, and an increase in the risk perception from

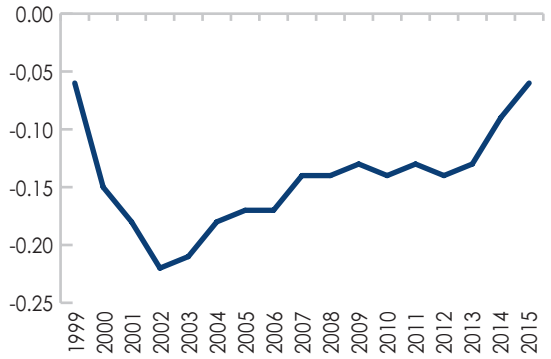
3 The three largest financial conglomerates control nearly two-thirds of total banks' assets, 87 percent of private pension funds (which represent over a quarter of Colombia's GDP) and over 60 percent of the country's total financial assets.

Figure 11.2 Financial sector structure 2016



Source: World Bank, Finstats Database 2018.

Figure 11.3 Boone indicator* in banking sector for Colombia



Note: *A measure of degree of competition based on profit-efficiency in the banking market. It is calculated as the elasticity of profits to marginal costs. An increase in the Boone indicator implies a deterioration of the competitive conduct of financial intermediaries.

international investors in a two-year horizon - from late 2016 to end 2018. This scenario is motivated by vulnerabilities identified in the FSR for the financial system in the current macroeconomic context, concluding that the total cumulative losses that credit institutions would suffer in the adverse scenario amount to 20.4 percent of the total capital of the system as of December 2016.,

Main Challenges

Inadequate oversight architecture and challenges for supervision of conglomerates

Colombia's financial oversight architecture has not adapted to recent changes in the financial sector structure. The Ministry of Finance and Public Credit (MHCP) is the consolidated financial sector regulator through its *Unidad de Regulación Financiera* (URF). FOGAFIN[4] and the *Superintendencia Financiera de Colombia* (SFC) are under MHCP's control. Changes to the structure of the Colombian financial sector, such as the increased internationalization of financial conglomerates, have exposed the need to enhance regulatory and supervisory standards.

The SFC has a broad mandate and a very centralized governance structure, despite various restructuring efforts undertaken since 2014. The SFC suffers from a host of methodological, operational and legal issues, it currently has numerous responsibilities in: prudential supervision,

4 The deposit insurance fund and resolution agency.

consumer protection and market conduct areas, including supervision of participants not covered by similar institutions worldwide. It is a fragmented and complex organization that makes supervision difficult and less effective. This broad authority and excessive workload present challenges for the SFC stretching its management and resources, and creating potential oversight gaps and bottlenecks. Its mandate for prudential supervision may sometimes be at odds with the role of promoting market development, or with enforcing consumer protection. SFC's staff lack adequate legal protection as they are covered for civil charges to some extent, but not for criminal charges; institutional decision-making processes are excessively complex and centralized; and IT systems are outdated. SFC's structure also presents challenges to the oversight of self-regulatory organizations by splitting the responsibility for oversight between a range of independent departments without a centralized coordination and with limited experience.

At present the responsibilities for recovery and resolution mechanisms are unclear. FOGAFIN's capacity to safeguard the public sector from bank failures - beyond the limits of its relatively small deposit insurance fund - needs to improve, and it has not adopted the innovations applied internationally following the 2008 crisis. It is therefore not in the position to address the too-big-to-fail problem, or the fiscal costs of eventual bailouts in the case of systemic crises. Furthermore, the resolution mechanisms of non-bank financial intermediaries remain unclear, as they fall outside of FOGAFIN's regulatory purview.

The prudential supervision complexities stemming from the increase in conglomeration and cross-border expansion (mainly in Central America) represent major challenges. Aside from cyclical factors, Colombian banks' credit profile face two structural features when assessing risks: (i) the prevalence of a few large, often systemically important, banks. These banks tend to be associated with related corporate parties with complex group structures including mixed-activity conglomerates; and (ii) the wave of foreign acquisitions in Central America[5], which may further strain Colombian banks' capital levels. Their capital levels already have relatively low ratios compared to those of peer banking systems. Following the global financial crisis, Colombian financial and economic groups took advantage of European banks selling their stakes in Central American subsidiaries. A strong Colombian peso and easy financing post-crisis also supported its international banking expansion strategy. Additional challenges of working in some of these countries include: elevated levels of dollarization, weak external and fiscal positions, slow GDP growth, and high political and social tensions.

Critical actions now include implementing the recently approved Law on Conglomerates; issuing complementary regulations; and implementing key Basel III reforms in the banking sector. The SFC lacks the supervisory power to assess and enforce requisite capital levels for conglomerates considering group-wide risks, as well as risks from corporate balance sheets and overseas exposures. Its supervisory authority over conglomerate members is too narrow, and this prevents consolidated financial reporting and risk management practices. It also leaves SFC with no legal authority to oversee unregulated bank holding companies: capital requirements and exposure limits only cover supervised entities.

5 Colombian banking conglomerates invested US$12 billion in purchasing the most systemically important banks in Central America, with assets of US$80 billion, representing about 25% of the three groups' assets in Colombia, major cross-border exposure with complex control and organizational models (in part in Panama).

The legal and regulatory framework for consolidated supervision faces challenges. There is no regulation that incorporates SFC's consolidated supervision activities and no risk management requirements. SFC has limited legal powers as they only cover supervised entities and their subsidiaries, excluding unregulated bank holding companies. The scope of consolidated prudential requirements is incomplete and uneven, as some requirements do not cover domestic subsidiaries while others exclude foreign subsidiaries. Moreover, effective management of cross-border flows and liquidity needs is affected by the complex ownership and offshore structure of the conglomerates.

Uneven capital markets development

Despite progress, development of capital markets is uneven. The government securities market is relatively large and liquid, and the private sector is underdeveloped. Colombia has the third largest local currency government bond market in LAC after Brazil and Mexico. Government bond markets amount to nearly 30 percent of GDP (compared to 118 and 53 percent in Brazil and Mexico, respectively). Most government debt is denominated in local currency; maturity of outstanding debt is mostly medium and long-term. Issued tenors extend to 15- year bonds, although liquidity is scarce at the longer end of the yield curve. In contrast, non-government debt is small (6 percent of GDP, compared to 19 percent in Mexico, and 36 percent in Brazil).

Equity market capitalization increased substantially over the last several years, but remains highly concentrated in a small number of issuers. As of December 2016, there were 80 listed companies across a range of sectors with a total market capitalization of approximately US$103 billion (36 percent of GDP). Traded volumes in shares were approximately US$ 14.2 billion in 2016 (5 percent of GDP, compared to 11 and 31 percent of GDP for Mexico and Brazil, respectively). The listings of a formerly fully state-owned company (Ecopetrol) and four large financial groups account for nearly 50 percent of the total market capitalization. Ecopetrol's privatization provided a boost to the retail market, but the buy-and-hold culture of investors and the subsequent upheaval in the oil market at the end of the commodity cycle stunted further development.

The underdevelopment of the non-government debt market causes low levels of liquidity. The growing demand for investable assets from domestic pension funds adds to the pricing pressure. Underdevelopment can be explained by elevated levels of bank dominance, risk aversion among institutional investors, concentration of the investor base dominated by two large pension funds, and regulations resulting in high issuance costs and long time-to-issuance. Innovations should be considered including the development of alternative assets through structuring of SME and microenterprise securitization as well as assets of infrastructure projects and credit cards. These could have partial guarantees from public or private financial entities, to improve the credit rating of such instruments.

The predominance of financial conglomerates in the financial system also affects capital markets development. This happens by controlling distribution channels and investment committees, and through ownership of other key players like private pension funds, finance companies, brokerage houses, and insurance companies. This affects investment fund diversification and reduces the interest to bring new players (including bond and commercial paper issuers) into the market.

The pension fund industry suffers from structural imbalances, which prevent competition and development within the domestic capital market. Each class of investors is highly concentrated. Fiduciaries that manage investment funds are largest in size and concentration with assets of nearly 30 percent of GDP as of December 2016; this is followed by pension fund management companies (AFPs) with 24 percent of GDP. Demand for pension funds is an essential factor shaping the supply of capital market instruments, but the sector is very concentrated. Their portfolio is also relatively conservative and subject to minimum return regulations linked to the industry average. This encourages extreme risk-aversion, herd behavior and near-perfect collusion between the two dominant funds. This structure has become a major impediment to future development of Colombian capital markets.[6]

The Pacific Alliance has potential to develop an integrated regional capital market. Results for the *Mercado Integrado Latinoamericano* (MILA) are still modest. The number and value of transactions made through the MILA, since its creation in 2011 are small, particularly for Colombia.[7] Challenges include further harmonization of regulations and taxation regimes on portfolio investments, high heterogeneity of investment guidelines and limited buckets to invest abroad.

The rapid development of new financial technologies (FinTech) to access alternative funding, including crowdfunding and peer-to-peer lending platforms has attracted a growing number of investors to the securities markets. This opens new ways of distributing products in capital markets. It also has given rise to new platforms and other trading venues based on increasingly complex technological systems and trading applications. With these innovative technologies comes a need to regulate the emerging industry to ensure investor protection, market and data transparency and operational security.

Limited access to finance and financial inclusion

Colombia's banking penetration has grown, but actual customer usage remains low. 2017 Findex data shows that 45.8 percent of Colombia's population has an account at a formal financial institution, compared to 39 percent in 2014. According to the 2016 National Financial Inclusion Report, as of June 2016, 77.3 percent of adults in Colombia had at least one financial product and 100 percent of municipalities had financial coverage through a banking correspondent and/or office. Despite these advances in access and coverage, new challenges in terms of financial inclusion remain, particularly in the use of financial products. Many payments between people are still made in cash, which results in travel, security and storage costs.

The uptake and usage of digital payment products is particularly low and costs are high. According to the 2017 Demand Survey of *Banca de las Oportunidades*, 95 percent of households pay for utility bills with cash. Moreover, 85 percent of adults with access to financial services use cash for their daily transactions.[8] This led the government to prioritize the use of electronic means of payment in the National Development Plan 2015-2018 (NDP). The NDP also set the goal of reducing the cash/M2 ratio

6 See also Policy Note #10 on Private Financing of Public Infrastructure.
7 Colombia invested $5.5MM in Chilean assets and US$0.4 MM in Peruvian assets as of 2016.
8 Findex 2017 data shows that 14.2 percent paid a utility bill using an account and 3 percent paid using a mobile device. Over 50 percent paid utility bills with cash only.

up to 8.5 percent for 2018 (compared to 13.3 percent in December 2014). Colombia's large informal economy is a key structural constraint to expanding online transaction. Many Colombians have difficulties using financial products in the informal economy because of consumers' lack of knowledge concerning financial products available, the benefits of using those products, and the institutions that provide them. The low usage of digital payment products and the high priority for the government reflects an urgent need to develop innovative channels to increase financial coverage in remote rural areas, while developing instruments that cater to lower-end income segments and address issues generated by informality.

Policy advances aimed at improving financial inclusion have been made but challenges remain. In addition to enacting national financial inclusion and education strategies, other reforms have also enabled branchless banking. Policy reforms have eased regulations and taxation of low-balance accounts; created a new regulatory and supervisory environment for microcredit; and encouraged the opening of bank accounts for many low-income families (*Familias en Acción*). The government has incentivized the presence of banking correspondents in municipalities with no banking presence, and it has also strengthened the financial infrastructure by creating a transparent system to facilitate lending. It has encouraged savings via formal financial institutions and lowered the cost of money transfers through the use of non-bank deposit institutions *Sociedades Especializadas en Depósitos y Pagos Electrónicos* (SEDPEs). However, the popularity of cash payments as a result of the informal sector, the financial transaction tax *Gravamen a Movimientos Financieros* (GMF 4x1000), high fees in the formal system, and low understanding of financial services limit the usage of financial services and undermine financial inclusion, particularly in the rural areas.

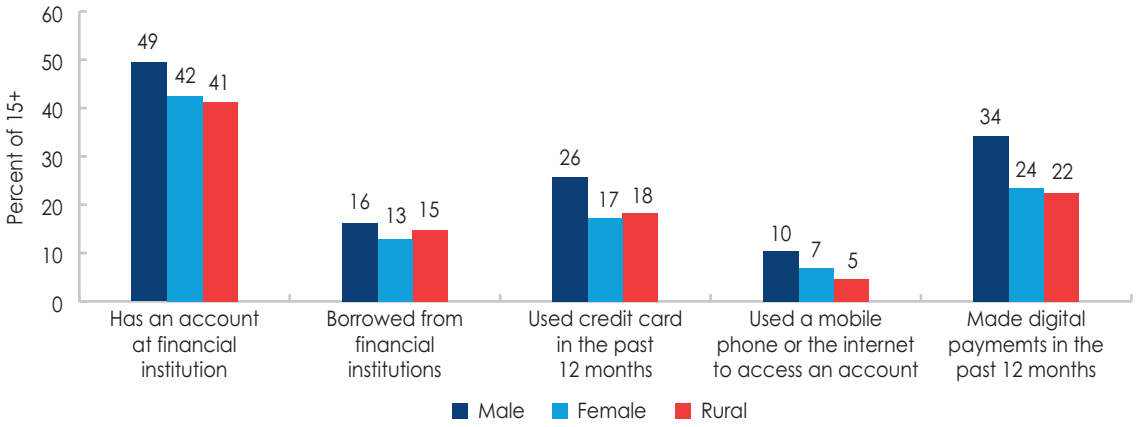
SMEs continue to face barriers to finance. According to the 2017 World Bank Enterprise Survey, approximately 25 percent of SMEs said access to finance is still a major constraint, including high loan-to-value ratios on collateralized loans at 165 percent of the loan amount. An important area of policy focus has been on business formalization but the rate of informality among SMEs remains high.[9]

Disparities in access to finance among specific segments, such as rural populations and women are significant. Prolonged internal conflict and the ensuing barriers associated with physical expansion have contributed to this disparity among rural populations. The microfinance sector has targeted programs for women, but micro credits are a small percentage of the overall lending portfolio of formal institutions. 41 percent of the rural population reported having a bank account at a financial institution in 2017, but less than 15 percent borrowed from a financial institution in the past 12 months (Figure 11.4).

The legal and regulatory framework for recently secured transactions seeks to address the mismatch between the collateral required by financial institutions (real estate) and the assets (movables) that SMEs typically must pledge to lenders. With over 1,675,000 registrations since its launch in 2014, the national registry of movable assets has been successful in offering transparency and facilitating the constitution of rights over movable assets used as collateral. However, SMEs only make up 2 percent of

9 Banco de la Republica (2016). Estimated that only 10 percent of micro-establishments in Colombia have access to financial products, July 2016.

Figure 11.4 Gender and rural disparity in access to finance



Source: Findex 2017.

registrations to date, indicating the need to deepen the impact of the reform. Low levels of SME registrations can be explained by risk aversion by financial institutions to lend against movables, the continued use of consumer loans for business purposes, as well as an over-reliance on government provided guarantees for lending to SMEs.

Policy Options

Strengthen the financial regulatory and supervisory architecture, particularly for conglomerates

Reforms to ensure greater institutional strength and operational advancement of the SFC could include: i) improving organizational efficiency, reducing internal fragmentation and excessive centralization of decision-making powers; ii) upgrading SFC's IT systems and undertaking a thorough review of its supervisory and internal risk assessment methodologies; iii) consider transforming the SFC's Advisory Committee into a collegial Supervisory Board with independent external directors; and iv) fostering greater coordination of regulatory and supervisory activities by enhancing the work of Supervisory Colleges and agreeing on formal Memoranda of Understanding (MOUs) with regulatory agencies and central banks from Central American countries. Moreover, potential adoption of a "twin peak" model could be positive in terms of encouraging the development of Colombia's capital market and promote financial innovations. This would also address conflict of interest concerns in terms of enforcing prudential supervision and market development. Other countries have dealt with the inherent difficulties of central banks and regulatory/supervisory agencies by granting full autonomy to the bank supervisor/regulator (Peru), defining roles more clearly for monetary and stability policies (United Kingdom), or establishing (separate financial) consumer protection agencies (USA).

Strengthening the independence and legal protection of the superintendent and other senior SFC officials is essential for making risk-based supervision viable. The head of the SFC is currently appointed by the government and is prone to political interference. A fixed-term appointment staggered between administrations would help ensure its independence. Moreover, the Financial Sector Coordination

Committee could be transformed into a Financial Stability Committee[10], to foster a more holistic, systemic and forward-looking approach to current and developing systemic risks. The central bank could play a stronger role as the secretariat of the revamped committee, and could also play a formal role as Colombia's macro-prudential authority.

It is recommended that the authorities continue strengthening FOGAFIN's bank recovery and resolution powers in a coordinated effort with URF and the SFC. FOGAFIN's law needs to be revised to develop its bank resolution powers and incorporate Financial Stability Board (FSB) recommendations and new international practices. New legislation should address the recovery and resolvability of systemically important institutions and financial conglomerates; it should seek simplification of the existing corporate control structures, and address the hidden risks in their cross-border investments and the holding structures established in Panama. The review also needs to assess the true risks of financial conglomerates and establish whether they have the required capital needed to support the risks they face and the risks they pose to the public purse.

To improve the effectiveness of the conglomerates law recently enacted, issuance of secondary legislation (decrees) and regulations is essential. It is necessary to define 'groups', financial conglomerates and holding companies under Art. 6 of the Financial Conglomerates Law. SFC's "integrated risk management system" should be formalized, with a view to eliminating "silos" and introducing qualitative risk assessments, with more emphasis on: corporate governance, transparency, disclosure of information, liquidity, related parties, large exposures, and counterparty risks. Capital requirements for financial conglomerates should also be defined, and the impact of the different proposals should be assessed, especially in the context of financial conglomerates with mixed activities. Rules pertaining to limits in exposure to related parties, conflicts of interest, and risk concentration should also be clarified and enforced.

SFC's capabilities to identify, monitor and respond to cross-border risks need to be strengthened. A comprehensive legal and regulatory framework is required to bind together the existing set of legal and regulatory rules relating to SFC's consolidated supervisory activities, including: reporting requirements on consolidated financial statements; access to information; consolidated exposure limits, consolidated capital and risk management requirements. To address inadequate supervisory reach under the new conglomerates law, monitoring of intra-group flows between regulated and unregulated entities needs to be enhanced. This process should involve the SFC and the *Superintendencia de Industria y Comercio*, the anti-trust regulator. The EU has extensive experience in the supervision of EU cross-border banking groups[11] and could serve as guidance for Colombia. Peru has also made important advances on this regard. Improving coordination in supervisory efforts is extremely helpful, however the country also needs to develop a

10 The existing Committee with membership of the four key agencies (MHCP as the chairs running the Secretariat, comprised of the central bank, MHCP, SFC and FOGAFIN) was established by Decree 1954 of October 7, 2014 as a coordination forum.

11 EU competent authorities have developed a framework of cooperation that is legally binding for all supervisory authorities in the European Economic Area (EEA) and with the adoption of a legislative package, a Directive and a Regulation to strengthen the regulation of the banking sector. Both legal acts together form the legal framework governing banking activities, the supervisory framework and the prudential rules for credit institutions and investment firms. The Directive also addresses colleges of supervisors.

comprehensive set of tools to identify systemic, country, operational (cyber risks), and interest rate risks on the banking book. This could include monitoring and mapping of foreign exchange and liquidity exposures of financial conglomerates.

To minimize risks from the presence of Colombian banks in Central America, their capital buffers need to be strengthened; a macro-prudential filter might be considered; and a regional body for stability could established to take charge of financial stability. Common regulatory and supervisory standards need to be established. Domestic and regional macro-prudential surveillance needs to be more efficiently coordinated, this could be achieved by working with confidentiality aspects related to information-sharing among government agencies. This improved coordination would also create a forum for addressing: the rising concerns over the deteriorating quality of loans issued by Colombian banks; higher FX exposures; weak prudential standards; and Anti Money Laundering/Combating the Financing of Terrorism (AML/CFT) frameworks.

Deepen capital markets with a focus on long-term finance

Structural impediments to the development of local capital markets should be analyzed in depth. Authorities could consider setting up a "Blue Ribbon" Commission, of domestic and international experts, to help develop the Colombian capital market, identifying top-down priorities, defining obstacles and offering a longer-term view, including how to address anti-trust issues.

Additional policy and regulatory efforts are necessary to strengthen and diversify the long-term institutional investor base. Reforms are necessary on several fronts as the current investor market structure is dominated by a highly-concentrated pension fund sector that limits competition and liquidity in the securities market. Potential reforms could: (i) enable *Fondo Nacional de Pensiones de las Entidades Territoriales* (FONPET) to become a more relevant player in long-term investments as a defined benefit pension fund[12]; (ii) review AFPs ownership and governance arrangements in the context of implementing the Conglomerates' Law, eventually seeking divestitures; (iii) increase the duration of the pension funds' fixed income portfolio; (iv) deepen the disability and survivorship annuity market[13]; (v) mature the role of the insurance sector as a more dynamic and longer-term investor; (vi) develop investment products in alternative assets via the use of non-traditional securitizations with possible partial guarantees by third-party institutions; and (vii) support the design and implementation of foreign exchange (FX) hedging instruments for infrastructure projects, such as an FX liquidity facility, with a view to expanding its investor base to foreign investors.[14]

At the same time, government bond markets need to be more efficient. Despite a relatively well-developed and efficient government bond market, liquidity tends to be concentrated in a few points of the yield curve. Actions to improve liquidity along the whole curve need to be identified. For this, issuance procedures of all relevant maturities need to be analyzed, developing a securities lending facility for market makers.

12 In order to promote FONPET, it would be important to attract international managers that participate in the market together with local fund managers. This would allow the reduction of the concentration and increase efficiency.
13 See also Policy Note #4 on Pension Reform for additional discussion on the annuities market, which will be key to promote the deepening of the capital markets.
14 See also Policy Note #10 on Private Financing of Public Infrastructure.

Authorities should continue to help develop the Pacific Alliance and MILA initiatives and take advantage of the newly created investment space. Promoting MILA is likely to increase domestic competition and bring new players to compete in the local market (a larger pool of players and financing). Further development of the Pacific Alliance Regional Mutual Fund Passport will promote long-term mutual funds and cross-regional business models; it will also encourage the Pacific Alliance to grow as a domestic investment space for pension funds with harmonized investment rules. So far progress has been slow and disappointing and many issues remain unresolved, including complex listing and taxation rules.

Expand financial inclusion and access to finance

Continued support is needed to help develop financial instruments that address the needs of people in lower income segments. Active promotion of SEDPEs could have a significant impact on meeting the financial needs of Colombia's un- and under-served. SEDPEs will need to be able to access switching platforms (currently controlled by banks) and mobile communication channels, on non-discriminatory terms. In addition, they must not be subjected to an overly onerous regulatory, supervisory, and reporting regime.

Further progress is required to expand the presence and reach of financial services in rural areas. Continued improvements in financial education should be at the forefront of this agenda. It will be equally important to transform non-regulated institutions into prudentially regulated ones and to equalize deposit insurance coverage between cooperatives and banks. Creditworthiness of the rural population could be assessed by introducing a general value-limit exemption for balance and transaction volume for wholesale e-accounts to incentivize use of electronic payments.[15] Developing a land title insurance product and finalizing the issuance of decrees and regulations supporting the movable collateral reform will further expand access to, and use of, financial services among the rural population.

Colombia would benefit from encouraging the growth of a well-regulated and supervised FinTech sector. Global trends in technological innovation in the financial services sector have shown great potential for advancing financial inclusion.[16] The most successful cross-country examples include regulatory sandboxes where FinTech companies can operate, evaluate their business models and offer their products in monitored environments. This will also facilitate a smooth transition towards an adequate regulation and supervision, for start-ups and oversight bodies. Usage metrics, and an enabling legal and regulatory framework conducive to growth of the FinTech sector need to be developed. Particularly, regulations for crowdfunding will be required to create a new viable source of funding for SMEs in the financial and capital markets. Close collaboration between public and private sector participants should be encouraged to help strengthen the overall business environment and the rapidly evolving ICT infrastructure.

To support access to finance, the impact of the secured transaction reform could be deepened. Special attention should be paid to designing credit products for the SME market,

15 As a result, SEDPEs would be able to compete with a full range of transactional services, leveling the playing field between SEDPEs and banks. It would increase competition for a wider range of services. Increased competition is likely to have a positive impact for consumers and fuel innovation and ultimately rural financial inclusion.
16 Experiences from UK, China, Singapore, and Mexico could prove useful in this respect.

especially those using movable property as collateral. The reform has introduced a relatively young regulatory framework and enforcement system, the effectiveness of which still needs to be fully tested in terms of: ability to establish a comprehensive system for rights and obligations between lenders and borrowers; preservation of those rights against third parties; and a timely and effective enforcement process in the case of default. Government funds need to be well researched to find ways to create a second loss guarantee fund. This would create a secure environment for financial institutions to test this framework, by offering movables-based loans to SMES. This fund would act as a standby guarantee to cover potential risks related to the new enforcement process, and to cover any discrepancy in the value of collateral between the time of loan origination and liquidation.

Annex 11.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Strengthen financial sector regulatory and supervisory architecture	• Rethink the structure of SFC and strengthen the independence of the superintendent • Strengthen the legal and regulatory framework to identify, monitor, and respond to cross-border risks and improve consolidated supervision • Finalize secondary regulation to improve the effectiveness of the conglomerates law, including regulations on the definition of 'groups', and holding companies; capital requirements for financial conglomerates; and exposure limits to related parties	• Strengthen FOGAFIN's bank recovery and resolution powers in a coordinated effort with URF and the SFC
2. Deepen Capital Markets	• Set up a "Blue Ribbon" Commission, of domestic and international experts, to develop a strategy for the deepening of Colombian capital markets, identifying top-down priorities, defining obstacles and offering a longer-term view	• Develop policy and regulatory changes to support a more diversified institutional investor base for long-term financing and improve liquidity of government bond market yield curve; and develop alternative asset instruments through securitizations • Promote MILA initiatives to increase domestic competition and bring new players to compete in the local market
3. Expand financial inclusion	• Encourage the growth of a well-regulated and supervised FinTech sector	• Promote the sustainability of financial sector operations in rural areas, with financial education at the forefront of this agenda • Deepen the impact of the secured transaction reform and evaluate options to create a second loss guarantee fund

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NOTE 12

GREEN GROWTH

Green growth is key to Colombia's efforts to sustain poverty reduction and shared prosperity. The country has abundant natural resources, including unique biodiversity, forests, productive land, solar and wind potential, and fossil energy and minerals. Moreover, it is building a strong international image in international environmental cooperation and as a green growth champion. But the country is facing important challenges. First, the country needs to reverse the mounting pressures on its ecosystems, driven by land use change and pollution, while promoting institutions and policies to boost the productivity of natural assets, like forests and land. Second, it needs to scale up efforts to attract investments in energy efficiency, resilient infrastructure, renewables, and to achieve universal energy access. Third, it needs to cope with the perverse effects of fast growth, particularly in urban areas, and rethink its strategy for managing waste.

Policy options can build on a strong track record of reforms. In order to achieve climate smart, sustainable and productive rural landscapes, the country should improve the incorporation of ecological considerations in land planning; put in place the vision and the institutional set up for a comprehensive national forest policy; strengthen institutions and capacities; enable the adoption of sustainable practices in agriculture and bio economy sectors; and address inefficient behaviors by clarifying land tenure, improving fiscal instruments, and enhancing incentives for forest management. In order to promote a new energy model, capable of exploiting the power of renewables, harness the potential for energy efficiency and maximize service delivery, the country needs to establish a clear energy policy and regulations; promote an adapted procurement framework for attracting new economic actors; expand the suite of financing options for investors; design and implement a rural electrification strategy. Finally, to mitigate the diseconomies of agglomeration and fast growth, the country should deepen the work on air quality norms; expand solid waste and city cleaning services regulation and investments; promote a circular economy paradigm and improve regulation of wastewater.

Context and Reform Progress

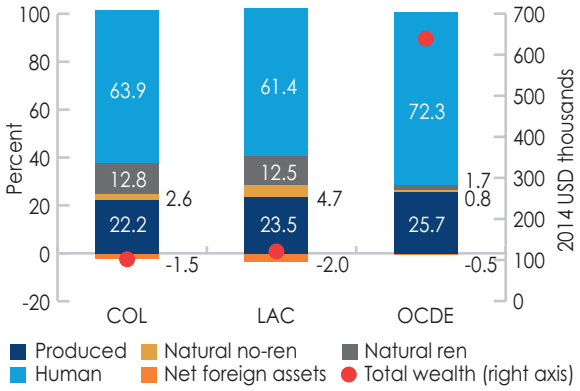
Colombia's prospects for sustained long-term economic growth cannot be separated from its abundant natural capital, yet the country's natural assets, particularly renewables, are under pressure. Empirical evidence shows that positive changes in a country's total wealth, i.e. inclusive of natural and human capital, are good predictors of long term growth.[1] Colombia is endowed with a diverse geography, a variety of landscapes and ecosystems, and considerable renewable and non-renewable resources. Hosting close to 10 percent of the planet's biodiversity, Colombia ranks second among countries with the greatest biodiversity in the world.[2] It ranks seventh in the world in terms of area covered by tropical forests[3]; natural forests cover more than half the country's mainland area. It possesses rich mineral and hydrocarbon reserves, and abundant water resources. In monetary terms, natural capital has represented on average 15 percent of the country's total wealth between 1995 and 2014, close to the regional average and well above OECD countries (Figure 12.1). This wealth of resources offers unique opportunities for economic growth based on nature-based and bio-economy sectors. However, the renewable portion of Colombia's natural capital has diminished over time. Figure 12.2 shows that comparator countries have by and large expanded the value of their agricultural land capital. Some countries have expanded their forest land capital (Chile, Costa Rica); others have depleted their forest land capital (Argentina, Ecuador). Colombia has reduced both types of renewable assets.

Committed to reconciling growth and the sustainable management of its natural capital, the country has become a green growth champion in recent years. Green growth has emerged as a model of growth that seeks to protect the country's natural capital base, reduce externalities associated with the costs of environmental degradation, contribute to competitiveness, and prevent the impacts of natural disasters and climate change. Colombia has taken concrete steps in the direction of this growth model. It adhered to the OECD Green Growth Declaration in 2012 and it has also committed to the Sustainable Development Goals (SDGs). Through the Bonn challenge, the country pledged to restore one million hectares of degraded land and has made an ambitious commitment to reach zero net deforestation in the Amazon by 2020 under the Tropical Forest Alliance. In addition, it increased the amount of protected areas, notably with the recent extension of the Serranía de Chiribiquete National Park. The Peace Agreement with the FARC targets environmental sustainability, stating that post-conflict development should guarantee socio-environmental sustainability and should not expand the agricultural frontier. Latest in this series of efforts, in February 2018, the Government of Colombia (GoC) completed its Green Growth Mission, which had been launched a year earlier, setting the basis for a long-term national green growth policy.

Colombia has given a great impetus to the climate change agenda at a global, national and local level. Following the approval of the Paris Agreement in July 2017, it committed to reducing greenhouse gas (GHG) emissions by 20 percent by 2030 (and up to 30 percent, conditional on receiving international support) in its Nationally Determined Contributions (NDC). The NDC contains sector-specific targets to 2030, accompanied by priority investment lines

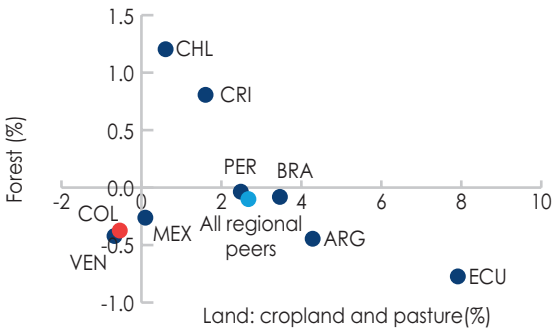
1 Hamilton (2005).
2 Convention on biological diversity (n.d.).
3 FAO (2015).

Figure 12.1 Composition of wealth per capita (average for the period 1995-2014)



Note: Forest includes timber and non-timber forest products.
Source: Authors based on data from Lange et al. (2018).

Figure 12.2 Renewable natural capital evolution: forest vs. agricultural land wealth average annual growth: 1995-2014 (selected peers)



Note: Forest includes timber and non-timber forest products.
Source: Authors based on data from Lange et al. (2018).

to achieve these goals and estimates of the investments required for their achievement. Moreover, the country now has a national carbon tax and is putting in place a mechanism for carbon neutrality which will allow firms to avoid the payment of the tax by investing in carbon reduction projects throughout the country. Other milestones include: the creation of the National Climate Change System and, in particular, the Inter-Sectoral Commission on Climate Change; the formulation of Integrated Climate Change Plans by the Ministries of Agriculture, Mines and Energy, Transport, Housing, Trade, Environment, Finance and Health; and the formulation of 22 Comprehensive Territorial Climate Change Plans.

This policy note argues that a continuation of recent efforts and further steps towards green growth are both necessary and feasible, and will be ever more relevant to the country's near- and long-term future. Colombia is already ahead of the curve on commitments to green growth and has achieved important policy shifts, such as the carbon tax approved in 2016; a new law on payment for ecosystem services; and new air quality standards approved in 2017. As low-hanging fruits are taken up, the agenda is becoming more and more ambitious and the country still faces challenges to sustaining implementation efforts, strengthening institutions, and achieving efficiency. Colombia can generate sustainable growth based on the comparative advantage of its natural capital and the efficient use of resources. It also needs to reverse and minimize degradation of the environment, build resilience to extreme weather events, and reduce waste. This policy note focuses on three sets of relevant challenges where the Bank has a solid knowledge base.

Main Challenges

Reversing the mounting pressures on Colombia's ecosystems, and maximizing the productivity of its natural capital

Forests and key ecosystems are being lost rapidly. Despite important efforts to address deforestation and although the rate of forest

loss in Colombia was significantly reduced between 2000 and 2015[4], it remains high and has recently increased, with 178,597 hectares of forest having been lost just in 2016[5], a 44 percent increase compared with 2015. Key ecosystems, such as paramos and wetlands, are also being severely degraded, and almost half of the 85 ecosystems identified in Colombia are in critical or endangered state.[6] The expansion of agriculture and livestock farming is the main driver of deforestation; however, an important underlying driver is illegal land grabbing fueled by expectations of eventual titling. This is particularly the case in forest frontiers and remote areas where land tenure is uncertain and where there is little state control or institutional presence. Current forestry and ecosystem trends contradict the GoC's own targets, hence the need to strengthen land use policies and their enforcement.

Deforestation and ecosystem degradation impose economic costs, undermine the potential for growth, increase vulnerability to extreme weather events, and hinder the capacity to achieve international commitments. Soil erosion[7], the loss of important ecosystem services such as water provision and hydrological regulation, and the loss of biodiversity – a key asset for nature-based economic sectors such as tourism, pharmaceuticals, cosmetics and agribusiness –are direct consequences of deforestation and ecosystem degradation. This degradation increases vulnerability to extreme weather events, expected to become more frequent and severe with climate change, causing floods (and landslides) and droughts, as well as negative socio-economic impacts that affect the poor more severely with loss of lives and assets and displacements. In 2010-11, La Niña caused floods and landslides that generated losses estimated at 2 percent of GDP of 2010 and affected over 3 million people.[8] In 2017, the landslide in Mocoa caused at least 333 deaths and affected over 22,000 people. Deforestation also delays progress on achieving Colombia's international climate change commitments. For example, 43 percent of the country's GHG emissions reductions are expected to be achieved via reductions in deforestation.[9]

The potential to develop a strong forestry sector remains untapped. Colombia is well suited for forest-related activities: half the country is covered by forests; and a further 13.6 million hectares of land could host forest plantations.[10] However, forestry development is incipient, the mandate to formulate an encompassing vision for the sector does not have a clear institutionality, less than 3 percent of land suitable for forest plantations is used as such, and Colombia is a net importer of timber products. Recent estimates indicate that if Colombia were to increase its commercial forest plantations by 464,000 hectares[11], it could become a net exporter. Gross production value of the forestry sector could be as high as US$ 4 billion and could create 35,000 permanent jobs in forest plantations and related industries.[12] But the

4 Average annual rate of forest loss fell from 0.52 percent for the period 2000-2005 and 0.47 percent for 2005-2010, to 0.25 percent for the period 2010-2016. IDEAM (2017b).
5 IDEAM (2017a).
6 WWF (2017).
7 90 percent of deforested area presents some degree of soil erosion, and overall 60 percent of soils suited for agriculture present some degree of erosion. IDEAM (2015).
8 CEPAL-BID (2012).
9 MADS (2017).
10 7.3 million ha have high suitability., 6.3 ha have medium suitability, and 11.3 have low suitability according to UPRA (2014).
11 World Bank (2017).
12 Ibid.

sector faces several barriers, including varying interpretations of norms and permits required, which generate confusion in the private sector and a long process for permit issuance, resulting in high transaction costs and affecting profitability. There is also a lack of silvicultural knowledge, especially with regards to native species, that need to be overcome. These are, to a considerable extent, the result of a missing institutional anchor that deals with technical, financial, legal and administrative aspects of forestry. Furthermore, given that 53.4 percent of forests lie in ethnic territories, empowering the governance of indigenous and Afro-Colombian communities and promoting community forest management could slow down land use change and generate a sustainable supply of timber and non-timber forest products.

Agricultural land is characterized by low productivity, under-investment, unclear tenure, and extreme vulnerability to climate change. Productivity and innovation in the agricultural sector are low, despite abundant land for agricultural production. Agricultural policy in recent decades has been heavily based on subsidies, market price support, and price stabilization mechanisms; while investments to enhance productivity and competitiveness, such as research and development, knowledge transfer, and improved infrastructure have received less attention.[13] Crop productivity and agricultural competitiveness is hampered by insufficient access to agricultural extension services, inefficient sanitary/phytosanitary services, and poor connectivity in some regions. Current land use patterns, whereby 80 percent of arable land is used for low productivity extensive cattle ranching[14], contributes to soil degradation and is a key reason behind increasing deforestation and greenhouse gas emissions. More efficient livestock production could be achieved in par with reduced emissions, particularly considering that the livestock sector is one of the largest contributions to emissions in the country. Efforts have been made in the generation of knowledge and development of practices for silvopastoral production, which have demonstrated positive impacts on productivity, biodiversity conservation, and carbon sequestration. The main challenge remains to scale-up these models. Productivity is also affected by insecurity of land tenure, hindering investment, and by climate shocks: the agricultural sector is extremely vulnerable to El Niño and La Niña events, making it urgent to adopt measures to adapt to climate change.

Intensified crop production in selected areas carries high risks, particularly from water demand and agrochemicals use. Commercial crops have expanded in recent years and require large amounts of water and fertilizer.[15] Colombia's abundant water resources are unevenly distributed across the territory, and competition for water is increasing. Only 33.3 percent of farmers use irrigation[16], but the agricultural sector accounted for 46.6 percent of water demand in 2015, mainly due to irrigation in large-scale production. Low water usage fees, despite the recent increase in water use tariffs from COP 0.81/m3 to COP 11.5/m3, and low collection rates by local environmental authorities (*Corporaciones Autónomas Regiona-*

13 OECD (2017).
14 The Mainstreaming Sustainable Cattle Ranching Project supported by the World Bank has shown evidence that number of heads per hectare could increase from 0.5-0.6, currently, to 1.5-2.5 heads per hectare; milk productivity could rise 15-25 percent.
15 The average annual rate of cultivated area expansion between 2011 and 2016 was 2 percent for coffee; 8.8 percent for oil palm; 3.1 percent for sugar cane; and 2 percent for potatoes. FAO (2017).
16 DANE (2015).

les, CARs) are ineffective in discouraging the inefficient use of water. [17] [18] Colombia is one of the largest consumers of nitrogen fertilizer and pesticides in the world.[19] Such monoculture systems, without crop rotation, can reduce overall biological diversity, disrupt the ecological balance of predator-prey species, affect pollinators, and increase pest risks. Farmers try to overcome these negative effects by applying even more non-specific pesticides. Furthermore, locking into unsustainable agricultural practices could reduce economic opportunities in global value chains where demand for environmentally friendly and socially responsible commodities offer attractive price margins and is expected to grow significantly.

Water, forests, and soils are affected by widespread illegal mining operations. Widespread informal gold mining, mainly in Antioquia and Choco, threatens these natural resources. As much as 95 percent of the 4,134 gold mining operations in the 2011 mining census had no environmental permit.[20] Most illegal mining takes place in the most bio-diverse areas, often in indigenous and Afro-Colombian territories and protected areas. Environmental impacts are severe: the use of mercury and other toxic substances causes severe environmental and health damages. Colombia is the world's largest mercury polluter per capita.[21] An additional problem with gold mining is that it is often related to criminal activity. This is a complex issue and involves many government bodies, who are trying to enforce the law and promote the adoption of better practices. For example, the approval of Law 1658 in 2013 prohibited the use of mercury in all economic activities, starting in 2018. Authorities are also trying to formalize the workforce and restore degraded sites, but coordination of these interventions is insufficient.

Incomplete efforts to invest in non-conventional renewables and achieve universal energy

The energy sector faces challenges in terms of climate resilience and sustainability, which can be best addressed by developing non-conventional renewable energy (NCRE)[22] and energy efficiency. Although the country has strong energy security, the heavy reliance on hydropower makes the energy sector vulnerable to weather events. Key priorities are to diversify energy sources, complete electrification, and provide electricity service to about 1.8 million Colombians. Expanding access is instrumental to supporting growth and development in poorer regions and in post-conflict areas. The development of NCRE sources has huge potential in Colombia[23]: it will help diversify the energy mix, strengthen efficiency in the electricity sector, and provide off-grid service in remote areas. Demand-side management and energy efficiency (EE), for which there is a very large potential given that millions of dollars are lost every year to inefficiencies, are also important climate change strategies, and are included in measures identified to redu-

17 Transforma (2018).
18 By law, revenues from water tariffs should be directed to projects related with the conservation of water resources.
19 With an average 172 kg of fertilizer per hectare of cropland in 2014, the country uses more fertilizer than Peru (48 kg), Mexico (53 kg), Ecuador (78 kg) and Chile (142 kg); and with and 20.8 kg of pesticides per hectare of cropland in 2014 it ranks 4th in terms of pesticides application worldwide.
20 Guiza and Aristizabal (2013).
21 Veiga, M. M. (2014).
22 In this document, we refer to non-conventional renewable energy as electricity or heat derived from solar, wind, ocean, small scale hydropower, biomass or geothermal resources.
23 Wind is assessed to be able to contribute 1,174 MW and up to 3,331 MW if the full potential located in La Guajira region is developed. An additional 574 MW could be provided by distributed solar generation, cogeneration using biomass and geothermal, taking the share of the 'NCRE block' to 10-16 percent of the energy mix.

ce GHG emissions from the energy sector by 20.6 percent. Actions to promote NCRE and EE would be important factors as part of an ambitious strategy to transition away from fossil fuel dependency.

An incomplete regulatory framework limits penetration of NCRE and energy efficiency strategies. With Law 1715 of 2012, Colombia established the legal framework for NCRE, but its regulation has been delayed. Despite abundant potential, the share of NCRE in the energy mix remains very small in both absolute terms, and when compared to other countries in Latin America that have developed markets based on auctions for renewable energy. NCRE development in Colombia is embedded in key national policies and supported by a robust legal framework, but there are no clear targets for development capacity. National plans mainly provide potential scenarios, and regulations to accommodate the risks of large-scale NCRE investments have not been completed. Existing regulations and procurement mechanisms based on auctions create a bias in favor of the existing energy mix: thermal and hydropower generation receive a reliability payment, and variable renewable energy (VRE) cannot compete on an equal footing. Off-take risks remain overly high, as there are no long-term contracts (power purchase agreements, PPAs) for NCRE and the off-taker segment is fragmented, with an array of incumbent utilities, mostly vertically integrated and often with low creditworthiness. Financing for large NCRE projects is therefore limited. The transmission infrastructure is insufficient for connecting load centers with locations where NCRE can be developed, and the grid code and rules for scheduling and dispatching VRE restrict NCRE integration. Also, the grid code and regulations are also not designed to facilitate the integration of demand-side resources.[24] There is an articulated legal framework for EE and small-scale NCRE that establishes tax, customs, market and accounting incentives and regulates delivery of electricity surplus to the grid, but EE regulation is also incomplete. The small size of investments and developers' inadequate performance record further constrain the market for small-scale NCRE and EE projects. The current market is therefore limited to financially viable projects developed by large companies with strong balance sheets.

A fragmented institutional framework, planning issues and insufficient financial resources are delaying progress to universal access. Providing electricity to remote areas involves many stakeholders that results in a complex governance framework and poses coordination issues. Inadequate planning and lack of familiarity with business models for developing off-grid electrification also impede progress. Investment needs far exceed the financial resources provided to finance electrification. In spite of this, a recent achievement of the government is the award by the Mining-Energy Planning Unit of the electricity transmission lines project that will connect wind generation in the Guajira to the National Interconnected System. The estimated investment for the nearly 370 kilometers of transmission lines will reach US$ 175 million.

Pollution and the side effects of fast growth

Worsening environmental quality may be limiting Colombian cities' potential to sustain inclusive economic growth. Cities provide economic opportunities but these can in turn be hampered by diseconomies caused by congestion and pollution. Over 70 percent of Colombians live in urban areas. The major ci-

24 Surplus from small-scale projects including self-generated electricity delivered to the grid.

ties of Bogota, Cali, Medellin and Barranquilla are home to 30 percent of the population and a high proportion of the country's jobs. Urban activities have contributed to more than 50 percent of the GDP growth rate in the last four decades[25], but the benefits of urban agglomerations as engines for economic growth are limited by increasing levels of pollution, environmental risk, inadequate waste management, noise levels and an overall sense of insecurity. The environmental quality of Colombian cities is considered "low" or "very low".[26]

Air pollution imposes a high toll on society despite important progress in reducing it. Progress has been made in addressing air pollution, for example air quality norms have been set in line with good global practice.[27] [28] Several measures have helped to reduce air pollution, for example through greening fuels: the Sulphur content of diesel fuel has been reduced by 98 percent[29]; mass public transportation has also been improved and emissions from stationary sources have been reduced. However, air pollution imposes significant costs to society. In 2015, over 8,000 deaths were related to low air quality[30] and fifty-one per cent of Colombians believe that air pollution is major environmental problem in Colombia.[31]. Health costs attributable to air pollution are estimated at COP 12 billion or 1.5 percent of 2015 GDP. Cities like Medellin, Soacha and Cucuta have annual particulate matter (PM10) concentrations that do not meet air quality standards. Even though the low-hanging fruits for reducing air pollution have been taken, additional gains are urgent and will require a careful consideration of benefits and costs of potential measures.

Substandard water quality, inadequate waste collection, and lack of green space also affect environmental quality of cities. All large cities and over 70 percent of medium-sized cities report having waterways with substandard water quality.[32] Waste collection services are high in urban areas (98 percent) and much waste that is collected is adequately disposed (94 percent). However, populations in the Atlantic and Pacific regions, in informal settlements and small towns, and in rural areas are less well served.[33] Cities' spatial pattern of growth also increases vulnerability to extreme weather events; more than 20 percent of the population in seven cities live in areas of high environmental risk. Only Medellin and five medium-sized cities provide more green areas than the World Health Organization standards (>9 m2 per person), and no city provides enough public space to meet Colombian standards (>15 m2 per person).[34]

Low reuse and recycling and limited landfill capacity could be used as an opportunity. Despite progress in collection and disposal of solid waste, waste management has followed an inefficient lineal model, with low reuse and

25 Urban activities include commerce, restaurants, hotels, manufacture, financing, and other services to support, among others. The calculations of GDP contribution based on World Bank calculations using a moving average of the component of the economy's growth rate contributed by purely urban activities. World Bank (2012).
26 Based on 37 reporting cities (29 with a population of 100,000-500,000 and 8 with population greater than 500,000). MADS (2015).
27 MADS (2017a).
28 In line with World Health Organization standards and good practices of cities such as Mexico City and Santiago de Chile.
29 DNP (2017).
30 DNP (2016).
31 DNP (2017a).
32 All 7 large cities and 15 of the 24 medium sized cities that report data have poor water quality. MADS (2015).
33 In the Caribean Region and Pacific collection coverage is, respectively, 74.8 and 54.6 percent. National rural areas have only 27.3 percent waste collection service coverage. DANE (2017).
34 MADS (2015).

recycling rates that - if improved - could result in significant savings, social opportunities and environment benefits. Only 15 percent of solid waste is recovered and reused[35], compared to an average of 46 percent in OECD countries. Most recycling depends on informal recycling, and only a small percentage of municipalities incorporate some form of formal recycling in their waste management activities. Most solid waste ends its life cycle in landfills. Projections of solid waste generation indicate that Colombia will not have adequate capacity to dispose waste by 2030. More land will be needed for landfills, the siting of which faces community opposition and increasing transport costs. Pursuing a circular economy, in which resources are kept in use for as long as possible, maximum value from them is extracted whilst in use, and at the end of each service life products and materials are recovered and regenerated. This is expected to reduce the long-term costs related to the need for landfills, provide net materials savings and could mitigate price volatility and supply risks.[36] It is also expected to encourage innovation and improve income for semi-skilled laborers, including workers in the informal sector where poor working conditions, inadequate social services and child labor is common. It would also contribute to the reduction of GHG emissions from waste, estimated at 14.3 metric tons of CO2 equivalent.[37]

Inadequate coordination of incentives and regulations poses challenges for efficient use of resources, and reuse and recycling activities. Incentives, standards and regulations for managing recovered materials do not match up with waste thresholds for the private sector (e.g. reuse of construction material).[38] Strategic plans, actions, and resources to implement the National Policy on Integrated Solid Waste Management (CONPES 3874) are inadequate; and the waste recovery tariff structure and methodology[39] is less effective than it could be as it does not incorporate infrastructure and treatment costs. There also needs to be more emphasis on data collection and overall monitoring of material cycles. Because of these challenges, estimates suggest that the economy's most productive sectors could be missing the opportunity to reduce waste by 40 percent and recover materials for reuse, remanufacturing, recycling or repair.[40]

Policy Options

Achieving climate-smart, sustainable and productive landscapes

Strengthen the incorporation of ecological and environmental concerns in land use planning efforts at all levels of government. A growing number of planning instruments and processes are being put in place by different government agencies. Enhanced coordination between different land use and development planning instruments is needed to ensure consistency between the underlying territorial develop-

35 Recent estimates indicate that the economy did not reuse or take advantage of 21.3 million tons of agro-processed biomaterials, 17.4 million tons of cement/concrete, 916 thousand tons cellulose biomaterials, 1.3 million tons of metals, 1.6 million tons of polymers, and 1.8 thousand tons of textiles in 2015. Tecnalia (2017).
36 An analysis for the European Union estimates that between US$340 and US$630 billion per year in net material savings could be accompanied by a shift in the cost curve of raw materials reducing demand drive volatility associated with the supply of scarce materials during times of high demand. Ellen Macarthur Foundation (2016).
37 Ideam (2017a).
38 The Tecnalia (2017) material and life cycle study estimates that the maximum reincorporation potential of materials (vs current recycling/upcycling rates) in six key sectors is 44 percent for biomaterials, 48 percent for cement and concrete, 20 percent for polymers, 10 percent for cellulose biomaterials, 26 percent for metals, and 95 percent for textiles.
39 CRA (2015).
40 Tecnalia (2017).

ment and environmental strategies, improve the integrity of ecosystems, increase resilience to climate change, and provide clarity for the private sector on how agricultural and other economic activities can be developed.[41] Specific steps in this direction would touch on the responsibilities and policies not only of various ministries, but of national, regional and municipal authorities. A first step is for MADS to strengthen a unified information system about ecosystems, land suitability, risks from weather events and land use, with common standards for the national territory and with detailed information at different jurisdictional and watershed level. Much of that information is already available in the Colombian Environment Information System (*Sistema de Información Ambiental Colombiano*, SIAC) and efforts to generate, periodically update and analyze the information should be strengthened. The SIAC needs to transition from an information system to a decision support system designed as a tool for decision makers. In addition, it is necessary to build capacities in local governments and CARs to be proficient users of the information. A second step is to overcome the municipal boundaries of local territorial plans and to facilitate and promote coordinated planning between jurisdictions. For example, the implementation of the General Territorial Planning Policy (*Política General de Ordenamiento Territorial*, PGOT) could promote coordinated planning between jurisdictions, mainstreaming land use suitability and disaster risk management elements in a way that overcomes the municipal boundaries of local territorial plans.[42]

Finalize the national forest policy and establish the National Forest Service, including the creation of a high-level entity, to develop, support and promote sustainable forest management. Effective enforcement of current regulations and the application of penalties for non-compliance by CARs remain essential aspects of managing forest assets, but the laying out of a comprehensive vision and regulation for the sector, including to incentivize sustainable use, are also key. Important progress has been made with the recent formulation of the Comprehensive Strategy for Deforestation Control and Forest Management.[43] This needs to evolve into a national forest policy to provide a clear vision about the role of the forestry sector for economic development. An agency that would act as the National Forest Service, which was mandated by Law 37/1989 but was never created, and which is transversal to the key line ministries (e.g. MADS and MADR) needs to be implemented. Its mission would be to lead and develop a strong, sustainable forestry sector (including commercial plantations), and to act as a focal point for policy planning that will guide forest conservation. It would ensure closer coordination between authorities in charge of the registration of commercial timber plantations, harvest permits, and the mobilization of supervision (between the *Instituto Colombiano Agropecuario*, ICA, CARs and the National Police) to avoid varying interpretations of norms and permits. It would need to remove barriers to financing and promote research and knowledge diffusion. It also needs to create legal instruments, such as the forest law that ensures and defines rights of use of forest resources; and develop guidelines for the management of these resources, especially in collective territories recognizing local knowledge and practices. This would also be

41 These instruments include Territorial Zoning Plans (POTs), Watershed Management Plans (POMCAS), development plans such as Rural Development Programs under a Territorial Approach (PDET), Social Land Plans led by the National Land Agency (ANT), and land planning activities undertaken by the Rural Agricultural Planning Unit (UPRA).
42 See also Policy Note #9 on Territorial Development.
43 MADS (2017b).

a first key step to promoting Community Forest Enterprises such as the ones generating rural income to *ejidos* and communities in Mexico, where the National Forest Commission (CONAFOR) leads conservation and development of sustainable forest policies and plans.

Enable conditions to develop the bio economy sector and scale up adoption of sustainable practices in agricultural production and agribusiness through research and knowledge dissemination and certifications. Several private sector initiatives are attempting to align production and environmental sustainability, while fostering productivity and competitiveness.[44] Given the country's rich biodiversity endowments, it is important to develop mechanisms to strengthen research, development and innovation in bio economy sectors (such as pharmaceuticals, cosmetics and food tech). This could be achieved by strengthening the capacity of *Colciencias*, in its role of facilitating knowledge transfer, by purchasing bio products through public sector procurement, and through public awareness campaigns. Investments are needed in the agricultural sector (crops and livestock) to develop and adopt new science and technology with green potential, such as agroforestry systems, precision agriculture, integrated pest management systems, soil management, and post-harvest loss and food waste reduction. The government should facilitate setting up incentives to support the adoption of good practices by small and large agricultural producers, and support market-based mechanisms such as traceability schemes and certifications that allow producers to access high-value and differentiated markets. Strengthening institutions like Agrosavia, in charge of research and knowledge dissemination, and ICA, and expanding their operational capacities to provide technical assistance and capacities to control sanitary and phytosanitary conditions is a priority. For the forestry sector, the development and dissemination of silvicultural practices, including technology for nurseries, treatment for forest plantations and natural regeneration, and phytosanitary monitoring is needed to improve productivity.

Improve and implement economic incentives to promote climate-smart agricultural practices, forests and key ecosystem restoration and conservation, water use efficiency, and GHG emission reductions. First, tariffs and fees need to be adequately designed to incentivize behavior change while improving revenue collection. For example, having a complete and updated cadaster with real information of property values can improve the role of property taxes in incentivizing productive land use and reduce incentives to accumulate land for purely speculative reasons. In addition, it would help with tax collection and increase revenues for CARs. Tariffs for water use need to be increased and the flat nature of the tariff for the agricultural sector needs to be reformed to incentivize efficient use of water and to improve revenue collection from CARs.[45] Updating systems for measuring water usage is essential to move away from the pricing system based on concessions. This should be accompanied by a more effective monitoring by the General Comptroller of CARs to ensure revenue collection and adequate monitoring of water usage. Second, economic incentives to recognize the positive externalities of climate-smart agriculture, and forest and key ecosystems restoration and conser-

44 For example, the Mainstreaming Sustainable Cattle Ranching Project implemented by FEDEGAN (Colombian Cattle Ranchers Association); the Sustainable Palm Oil Landscapes Project, implemented by Fedepalma; and the AMTEC a rice program, implemented by FEDEARROZ (Colombia's rice federation).
45 Transforma (2018).

vation need to be regulated and adjusted. A set of regulatory instruments should be issued for the Payment for Ecosystem Services Law, issued in 2017. These instruments need to define actions or land use decisions that will be subject to payment, as well as the level of this payment. Opportunity costs of land use and the value of ecosystem services provided (e.g. biodiversity conservation, carbon storage, hydrology benefits) should be considered when determining payment levels. Targeting should also be based on the level of threat and/or the importance of ecosystem services provided. A monitoring, reporting and verification system (MRV) will be needed to establish a baseline and verify compliance with sustainable practices[46], expanding the existing forest monitoring systems managed by the Institute for Hydrology, Meteorology and Environmental Studies (*Instituto de Hidrología, Meteorología y Estudios Ambientales*, IDEAM). With regards to the Certificado de Incentivo Forestal (CIF), technical prioritization criteria need to be introduced based on environmental benefits of projects to ensure additionality, and costs related to procedures and wait times should be kept to a minimum to incentivize small- and medium-sized producers' participation in CIF benefits. At the same time, a tax exemption on capital gains from agroforestry and forestry investments could put Colombia on par with countries like Uruguay, which has attracted substantial foreign direct investments due to its favorable tax structure for forest plantations. Finally, to promote carbon markets it is key to operationalize the National Emissions Reduction Registry and create a robust system that enables certification and trade of emissions reductions, which would allow to reduce emissions in an efficient way and avoid double counting.

Emphasize capacity building of environmental authorities and identify opportunities available through the emerging green fiscal regime. Environmental authorities – MADS, CARs, National Parks and other entities from the *Sistema Nacional Ambiental* (SINA) – need to have adequate levels of human capacity and financial resources for policy formulation and regulation, monitoring and evaluation, and compliance. This also applies to research institutes and entities in charge of dissemination of good practices and technological packages. Revenues from the carbon tax open an opportunity to finance the strengthening of these institutions. The Colombia Peace Fund (*Fondo Colombia en Paz*) will allow investments in peace building and environmental sustainability, complementary objectives that can be achieved through programs and activities that explicitly target both objectives.

Renewing the energy development model

Establishing a clear policy, a regulatory framework and a competitive and transparent procurement framework for NCRE and EE. NCRE-based technologies are well established and financially attractive at the global level, and there is strong interest from Colombia's private sector. The penetration of NCRE in the energy mix (capacity volumes by technology) should be well defined and should focus on energy needs, existing and planned generation investments, and reliability requirements. Regulation needs to be adjusted, and long-term financing and credit risks need to be fully addressed. New regulatory measures could include: (i) a specific price- or quota-based incentive to lower the risks of NCRE development (e.g. auctioning of long-term contracts); (ii) regulations that facilitate access and connec-

46 Ibid.

tion to the grid; and (iii) an adjusted grid code that supports optimal dispatching of supply- and demand-side energy. Long-term PPAs, properly designed and procured via auction, are critical for developing a market for NCRE projects. A Central Offtake Agency (COA) role is needed to centralize the procurement function and conduct public auctions with standard and bankable PPAs.[47] Regulations for small-scale NCRE and EE projects need to be well designed. Measures could include standard offers, demand management, capacity and energy auctions, and white certificates.

Expand the suite of private financing options and investment vehicles for NCRE.[48] Meeting financial needs for large projects will require updated private financing options, new sources (e.g. equity sponsors), local and international commercial banks, capital markets with institutional investor participation, and intermediary investment vehicles including infrastructure funds. The nascent status of the clean energy market and the untested regulatory environment require risk mitigation and credit enhancement to make large-scale projects bankable and to mobilize long-term competitive private financing. Aggregating small-scale NCRE and EE projects via a specific vehicle can help overcome limitations associated with small investments and could attract more commercial financing if also backed by adequate credit enhancement.

Design and implement a rural electrification strategy to achieve universal access. Technical options need to be efficient and based on the energy needs of non-served areas and geospatial mapping, which could help with this level of planning. Grid extension remains critical in densely populated areas, but mini-grids and off-grid schemes using renewable energy, especially solar, provide better options in more remote areas. An efficient combination of public and private involvement with strong institutional, business and contracting models will help accelerate the use of NCRE, selecting the best combination of public and private involvement and ensuring sustainable service provision overtime. Thus, the national rural electrification strategy shall entail: (i) definition of service configuration and technical options based on a clear understanding of the locations involved and the socio-economic circumstances of targeted communities; (ii) identification of the most suitable institutional and business models to accelerate the use of renewable energy technologies where suitable; (iii) allocation of responsibilities across GoC agencies and between the public and the private sector; and (iv) definition of financing mechanisms.

Transitioning towards a green growth planning approach in Colombian cities, industries and a circular economy

Implement targeted actions in the transport and industrial sectors to meet air quality norms. Air quality authorities, especially the central authority currently under MADS, need enhanced capacity to comply with the updated air quality standards through coordination and support to multiple local air pollution control authorities and more effective compliance and enforcement. Improving information on air pollution sources is part of effective air pollution management: for example, by implementing the

47 Candidate institutions for this role include MINMINAS, UPME, the Energy Regulatory Commission (CREG) or the Electricity Market Operator and Administrator (XM) (or another agency, such as the National Compensation Chamber, Central Off-Take Risk Chamber, or DERIVEX). The COA would act as a "custodian" of long-term PPAs and manage credit, liquidity and operational risks.

48 See also Policy Note #10 on Private Financing of Public Infrastructure.

pollutants release and transfer registry in line with the Kyev Protocol and OECD standards. In the transport and industrial sectors and in small-scale, often informal, activities, targeted actions such as scrapping old vehicles is urgent. It is also important to improve vehicle emissions inspections and to replace older models. Compensation should be provided to vulnerable families whose resources are invested in these vehicles. A program for electric mobility should be formulated, starting from the public transport system. When selecting public transportation options, the costs of air pollution of different alternatives should be included as a decision factor. Fine-tuning tax and tariff incentives will ensure that transaction costs do not conflict with existing tariff exemptions for clean technologies (e.g. clean technology vehicles). Finally, coal should be included among the fossil fuels taxed by the carbon tax.

Address important gaps in city cleanliness and health, through expansion of service regulation and a national investment program. Today, the major driver of investment in solid waste services[49] has been the tariff system[50] which provides a ceiling price charged by service providers. The tariff system needs expansion to adapt to gaps in waste collection and disposal services in rapidly urbanizing areas and informal settlements. Specialized services, such as construction waste collection, should be included in the tariff system. The regulation of city cleaning services should also be strengthened. The accompanying infrastructure investment needs in this sector are estimated to exceed COP 3,361 billion (US$ 1.1 billion) over the next 10 years, one-third of which can be covered by the tariff regime, and financing sources for the remainder still need to be identified.[51]

Promote circular economy concepts by updating and aligning existing regulations on materials and waste. To transition towards greater material efficiency and waste reduction, the GoC can develop business schemes that incite innovation, introduce target indicators, and promote consumer awareness. First, it could promote minimum performance or material requirement standards in key economic sectors with high potential for sustainable materials management. For example, this could be done by facilitating green building certification for new housing, hotels, office buildings, retail space and hospital constructions (e.g. IFC EDGE – *Excellence in Design for Greater Efficiencies*) wherein construction material reuse is promoted. It could also promote technical guidelines for eco design and eco labels. Second, the circular economy approach could update the National Policy for Solid Waste Integrated Management[52] to include functional economic instruments and reinforce the governance of material cycles. It should set recycling targets for municipal and packaged waste, and place maximum caps for landfill use. Best practice examples include relatively high landfill and incineration taxes, pay-as-you-throw schemes, waste shipment regulations, and local landfill bans of various waste streams (e.g. on organic waste). Third, the adoption of a regulatory framework for non-hazardous industrial materials is needed to clarify rules on by-products and secondary materials markets that allow for the establishment of symbiotic exchanges (e.g. as in eco-industrial parks). Fourth, reducing food loss and waste has a great potential to reduce GHG emissions in the larger agriculture and food systems. The GoC should analyze ways to reduce this type of waste and design a national policy to address this issue.

49 Including 85 percent of financing.
50 Based on data from 2013. DNP, World Bank (2014).
51 Ibid.
52 CONPES 3874.

Regulate wastewater discharges from non-domestic sources into soil and water. Non-domestic waste water is commonly discharged from the oil and mining industry. As part of the transition to a circular economy, the GoC should establish the requirements for discharging non-domestic water into soil and water bodies that include partial water treatment and reinjection of water into aquifers under special circumstances, i.e. when salinity of the aquifer is higher than the water discharge. In addition, regulations should include the conditions required for granting permits for non-domestic water discharges into soil. These actions would not only reduce pollution but would incentivize re-use.

Annex 12.1 Matrix of Policy Options

Development Challenge	Policy Options	
	Short Term	**Medium Term**
1. Achieving climate-smart, sustainable and productive landscapes	• Finalize the national forest policy, establish the National Forest Service, including the creation of a high-level entity to develop, support and promote sustainable forest management (***) • Improve and implement economic incentives to promote climate-smart agricultural practices, forest ecosystem restoration and conservation, water use efficiency, and GHG emission reductions (***) • Emphasize capacity-building of environmental authorities and invest in programs that explicitly target environmental sustainability with revenues from the carbon tax (***)	• Strengthen the incorporation of ecological and environmental concerns in land use planning efforts at all levels of government (**) • Enable conditions to develop bio economy sectors and to scale up adoption of sustainable practices in agricultural production and agribusiness through research and knowledge dissemination and certifications (**)
2. Renew the energy development model	• Establish clear policy, a regulatory framework and a competitive and transparent procurement framework for Non-Conventional Renewable Energy (NCRE) and Energy Efficiency (**)	• Expand the suite of private financing options and investment vehicles for NCRE (*) • Design and implement a rural electrification strategy to achieve universal access (**)
3. Transition towards a green growth planning approach in cities and promote a circular economy	• Implement targeted actions in the transport and industrial sectors to meet air quality norms and improve air quality information systems (***) • Regulate wastewater discharges from non-domestic sources into soil and water (**)	• Promote circular economy by updating and aligning regulations on materials and waste (*) • Address important gaps in city cleanliness and health, through expansion of service regulation and a national investment program (**)

**Note*: stars indicate a suggested level of priority based on two possible criteria: (i) extent to which the policy is urgent to avoid risk of lock-in and irreversibility, and (ii) capacity of the policy to provide local (i.e. national as opposed to global) and immediate benefits. (***) = very high priority; (**) = high priority; = (*) priority. This is meant to be indicative only and should not discourage priority setting based on different criteria and with the involvement of different stakeholders.

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